Cumulative Bio-Bibliography
University of California, Santa Cruz
June 2020

Puragra Guhathakurta
Astronomer/Professor
University of California Observatories/University of California, Santa Cruz

ACADEMIC HISTORY

1980–1983	B.Sc. in Physics (Honours), Chemistry, and Mathematics, St. Xavier's College, University of Calcutta
1984–1985	M.Sc. in Physics, University of Calcutta Science College; transferred to Princeton University after first year of two-year program
1985–1987	M.A. in Astrophysical Sciences, Princeton University
1987–1989	Ph.D. in Astrophysical Sciences, Princeton University

POSITIONS HELD

1989–1992	Member, Institute for Advanced Study, School of Natural Sciences
1992–1994	Hubble Fellow, Astrophysical Sciences, Princeton University
1994	Assistant Astronomer, Space Telescope Science Institute (UPD)
1994–1998	Assistant Astronomer/Assistant Professor, UCO/Lick Observatory, University of California, Santa Cruz
1998–2002	Associate Astronomer/Associate Professor, UCO/Lick Observatory, University of California, Santa Cruz
2002–2003	Herzberg Fellow, Herzberg Institute of Astrophysics, National Research Council of Canada, Victoria, BC, Canada
2002–	Astronomer/Professor, UCO/Lick Observatory, University of California, Santa Cruz
2009–	Faculty Director, Science Internship Program, University of California, Santa Cruz
2012–2018	Adjunct Faculty, Science Department, Castilleja School, Palo Alto, CA
2015	Visiting Faculty, Google Headquarters, Mountain View, CA
2015–	Co-founder, Global SPHERE (STEM Programs for High-schoolers Engaging in Research Early) Network
2019–	Chair, Department of Astronomy and Astrophysics, University of California, Santa Cruz

HONORS AND AWARDS

1985	National Talent Search Scholarship (annual all-India award)
1986	Thaw Prize in Astrophysics, Princeton University
1992–1994	Hubble Fellowship, Princeton University, Astrophysical Sciences
1997–2001	Alfred P. Sloan Research Fellowship, University of California, Santa Cruz

2002–2003	National Research Council of Canada's 2001 Herzberg Memorial Prize and Fellowship
2018	Raymond and Beverly Sackler Distinguished Lecturer, Tel-Aviv University
2019	7th Father Verstraeten Memorial Lecturer, St. Xavier's College, Kolkata, India
2020	Distinguished Scientific Visitor, Space Telescope Science Institute

RESEARCH SUPPORT

2020–2022	NASA/Space Telescope Science Institute "Tracing the 6-D Orbital and Formation History of the Complete M31 Satellite System"	$24,871
2020–2022	NASA/Space Telescope Science Institute "Resolved Proper Motions of M31 and the M31-M32 Interaction"	$30,057
2019–2022	National Science Foundation "Collaborative Research: Kinematics and Chemistry of M33 – Determining the Past, Present and Future of the M31/M33 System"	$379,116
2018–2021	NASA/Space Telescope Science Institute "Proper Motions of Two Local Prototype Dwarf Elliptical Galaxies NGC 147 and NGC 185"	$15,001
2017–2020	NASA/Space Telescope Science Institute "Massive Star Clusters and the Origin of Ultra-Diffuse Galaxies"	$32,572
2017–2020	NASA/Space Telescope Science Institute "A Legacy Imaging Survey of M33"	$29,873
2017–2020	NASA/Space Telescope Science Institute "Milky Way Cosmology: Laying the Foundation for Full 6-D Dynamical Mapping of the Nearby Universe"	$20,112
2016–2020	National Science Foundation "HALO7D: The Chemical and Kinematic Dimensions of Milky Way Halo Assembly," co-investigator with PI Rockosi	$367,747
2016–2020	NASA/Space Telescope Science Institute "The Coma Cluster Core Project"	$19,513
2016–2019	NASA/Space Telescope Science Institute "The Evolution of Metal-rich Asymptotic Giant Branch Stars"	$3,141
2015–2018	NASA/Space Telescope Science Institute "Project AMIGA: Mapping the Circumgalactic Medium of Andromeda"	$10,051

2015–2018	NASA/Space Telescope Science Institute "Resolved Halo Substructures Beyond the Local Group: The Assembly Histories of NGC 253 and NGC 5128"	$14,704
2015–2019	NASA/Space Telescope Science Institute "The Nature of Compact Stellar Systems in Massive Galaxy Clusters Using the Hubble Frontier Fields"	$128,829
2015	Visiting Faculty Salary from Google "Expansion and Diversification of the University of California Santa Cruz Science Internship Program"	$122,115
2014–2017	National Science Foundation "Collaborative Research: Age-Dating M31's Halo and Satellites – Testing the Lambda CDM Paradigm"	$217,627
2014–2017	National Science Foundation "Collaborative Research: An Archaeological Survey for Substructure in the Stellar Halos of the Nearest Massive Galaxies"	$65,104
2013–2016	NASA/Space Telescope Science Institute "Proper Motions of Distant Halo Stars: New Clues to Milky Way Structure, Evolution and Mass"	$58,875
2012–2015	NASA/Space Telescope Science Institute "The Masses of Supernova Remnant Progenitors"	$14,995
2011–2015	NASA/Space Telescope Science Institute "The Formation History of the Ultra-Faint Dwarf Galaxies"	$46,188
2010–2019	NASA/Space Telescope Science Institute "A Panchromatic Hubble Andromeda and Triangulum Survey"	$241,618
2010–2016	National Science Foundation "Collaborative Research: M31 Satellites Past and Present"	$316,152
2009–2014	National Science Foundation "On the Origin of Abundance Inhomogeneities," co-investigator with PI Smith	$328,609
2008–2016	National Science Foundation "The DEEP3 Survey—Three Fundamental Tests of Galaxy Evolution," one of three co-investigators with PI Faber	$1,701,777
2008–2010	NASA/Space Telescope Science Institute "Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185"	$25,717

2008–2010	NASA/Space Telescope Science Institute "The First Proper Motion Measurement for M31: Dynamics and Mass of the Local Group"	$7,500
2008–2009	Institute for Geophysics and Planetary Physics—LLNL "Local Group Dwarf Galaxies and Hierarchical Galaxy Formation"	$41,500
2006–2009	National Science Foundation "Collaborative Research: The Assembly History of the Andromeda Spiral Galaxy"	$314,758
2006–2008	NASA/Space Telescope Science Institute "Direct Age Determination of the dE Galaxies NGC 147 and NGC 185"	$50,000
2006–2008	NASA/Space Telescope Science Institute "The Formation History of Andromeda's Extended Metal-Poor Halo"	$75,010
2005–2008	National Science Foundation "Collaborative Research: The DEEP Survey—Emergence of the Modern Universe," one of three co-investigators with PI Faber	$1,305,439
2004–2006	NASA/Space Telescope Science Institute "The Evolution and Assembly of Galactic Disks: Integrated Studies of Mass, Stars and Gas in the Extended Groth Strip"	$138,590
2004–2006	NASA/Space Telescope Science Institute "The Formation History of Andromeda"	$72,528
2003–2006	National Science Foundation "Collaborative Research: Structure and Evolution of M31's Stellar Halo from a Large-Scale Spectroscopic Survey"	$116,598
2003–2004	University of California, Santa Cruz, Special Research Grant "The Stellar Halo of the Andromeda Spiral Galaxy"	$9,000
2003–2004	Institute of Geophysics and Planetary Physics—LLNL "Dark Matter Content and Internal Dynamics of M31's Dwarf Spheroidal Satellites"	$32,224
2002–2003	Herzberg Memorial Prize (CAN $25,000) and Fellowship (CAN $150,000), National Research Council of Canada "M31 Stellar Populations, 47 Tucanae, and Galactic Cirrus"	$127,522
2001–2002	Institute of Geophysics and Planetary Physics—LLNL "The Stellar Counterpart of Compact High Velocity Clouds," PI/Faculty Advisor with L. Pittroff	$19,540

2001–2002	NASA/Space Telescope Science Institute "A Snapshot Survey of Probable Nearby Galaxies"	$10,613
2000–2005	National Science Foundation "Collaborative Research: The DEEP Survey of the Distant Universe," one of three co-investigators with PI Faber	$1,282,902
2000–2001	Institute of Geophysics and Planetary Physics—LLNL "Searching for Quasars in the MACHO Database," PI/Faculty Advisor with M. Geha	$19,348
1999–2002	NASA/Astrophysics Data Program "The Properties of Interstellar Dust Grains in IRAS Cirrus Clouds"	$159,572
1999–2002	NASA/Space Telescope Science Institute "Taking the Measure of Planets in the Globular Cluster 47 Tucanae"	$104,777
1999–2001	NASA/Space Telescope Science Institute "A Snapshot Survey of Probable Nearby Galaxies"	$17,000
1999–2001	NASA/Space Telescope Science Institute "Nuclear Kinematics of the Dense Globular Cluster M15"	$11,500
1997–2001	Alfred P. Sloan Research Foundation "Galaxy Evolution and the Centers of Dense Globular Clusters"	$35,000
1997–2000	NASA/Graduate Student Research Program "Multiwavelength Study of the Evolution of Clusters and their Constituent Galaxies," PI/Faculty Advisor with A. Shambrook	$66,000
1997–1998	NASA/Space Telescope Science Institute "Probing the Fine-Scale Structure and Colors of Interstellar 'Cirrus' Clouds"	$55,144
1997–1998	California Space Institute "The Structure and Dynamics of Distant Disk Galaxies"	$20,356
1996–1998	NASA/Space Telescope Science Institute "Measuring Luminosity Evolution in $z = 0.3$ Field Galaxies from Internal Kinematics"	$23,117
1996–1997	University of California, Santa Cruz, Faculty Research "The Structure and Evolution of Spiral Galaxies"	$2,500
1995–2000	NASA/Long-Term Space Astrophysics "The Properties of Interstellar Dust Grains in 'Cirrus' Clouds"	$272,400

1995–1996	California Space Institute "The Amount and Distribution of Dark Matter in Rich Galaxy Clusters at Moderate Redshifts"	$29,739
1995–1996	University of California, Santa Cruz, Faculty Research "The Properties of Interstellar Dust Grains in 'Cirrus' Clouds"	$2,000
1995–1996	University of California, Santa Cruz, Divisional Dean's Seed Fund "The Near Infrared Tully-Fisher Relation of Field Galaxies at $z = 0.3$"	$9,000
1994–1995	University of California, Santa Cruz, Faculty Research "The Mass-Luminosity Relation for Galaxies at $z = 0.3$: A Test of Galaxy Evolution"	$2,000

BOOKS

1. *Discoveries and Research Prospects from 6- to 10-Meter-Class Telescopes II. Proc. SPIE 4834,* ed. P. Guhathakurta (Bellingham, WA: Society of Photo-optical Instrumentation Engineers), 2003.

ARTICLES IN REFEREED PROFESSIONAL JOURNALS

1. Interstellar Dust in Shapley-Ames Elliptical Galaxies. M. Jura, D.-W. Kim, G.R. Knapp, and P. Guhathakurta. *ApJL*, **312**, L11–L15, 1987.

2. A VLA HI Survey of Virgo Cluster Spirals: II. Rotation Curves. P. Guhathakurta, J.H. van Gorkom, C.G. Kotanyi, and C. Balkowski. *AJ*, **96**, 851–866, 1988.

3. HI Observations of the Elliptical Galaxies NGC 2974 and NGC 5018. D.-W. Kim, P. Guhathakurta, J.H. van Gorkom, M. Jura, and G.R. Knapp. *ApJ*, **330**, 684–694, 1988.

4. IRAS Flux Densities for Early-Type Galaxies. G.R. Knapp, P. Guhathakurta, D.-W. Kim, and M. Jura. *ApJS*, **70**, 329–387, 1989.

5. Temperature Fluctuations in Interstellar Grains: I. Computational Method and Evaporation of Small Grains. P. Guhathakurta and B.T. Draine. *ApJ*, **345**, 230–244, 1989.

6. Optical Characteristics of Galactic 100μm Cirrus. P. Guhathakurta and J.A. Tyson. *ApJ*, **346**, 773–793, 1989.

7. What the Longest Exposures from the *Hubble Space Telescope* Will Reveal. J.N. Bahcall, P. Guhathakurta, and D.P. Schneider. *Science*, **248**, 178–183, 1990.

8. A Redshift Limit for the Faint Blue Galaxy Population from Deep *U* Band Imaging. P. Guhathakurta, J.A. Tyson, and S.R. Majewski. *ApJL*, **357**, L9–L12, 1990.

9. On the Population of HI Dwarf Galaxies. D.H. Weinberg, A. Szomoru, P. Guhathakurta, and J.H. van Gorkom. *ApJL*, **372**, L13–L16, 1991.

10. The Clustering of Faint Galaxies. G. Efstathiou, G. Bernstein, N. Katz, J.A. Tyson, and P. Guhathakurta. *ApJL*, **380**, L47–L50, 1991.

11. Evidence for Dwarf Stars at D ~ 100 kpc Near the Sextans Dwarf Spheroidal Galaxy. A. Gould, P. Guhathakurta, D. Richstone, and C. Flynn. *ApJ*, **388**, 345–353, 1992.

12. Constraints on Baryonic Dark Matter in the Galactic Halo and Local Group. D. Richstone, A. Gould, P. Guhathakurta, and C. Flynn. *ApJ*, **388**, 354–361, 1992.

13. Globular Cluster Photometry with the *Hubble Space Telescope*. I. Description of the Method and Analysis of the Core of 47 Tucanae. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. *AJ*, **104**, 1790–1817, 1992.

14. Photometric Calibration of NGS/POSS and ESO/SRC Plates Using the NOAO PDS Measuring Engine. II. Surface Photometry. R.M. Cutri, F.J. Low, and P. Guhathakurta. *PASP*, **105**, 106–113, 1993.

15. The Near-Infrared Tully-Fisher Relation: A Preliminary Study of the Coma and Abell 400 Clusters. P. Guhathakurta, G. Bernstein, S. Raychaudhury, M. Haynes, R. Giovanelli, T. Herter, and N. Vogt. *PASP*, **105**, 1022–1027, 1993.

16. The 1990 Calán/Tololo Supernova Search. M. Hamuy, J. Maza, M.M. Phillips, N.B. Suntzeff, M. Wischnjewsky, R.C. Smith, R. Antezana, L.A. Wells, L.E. Gonzales, P. Gigoux, M. Navarrete, F. Barrientos, R. Lamontagne, M. DellaValle, J.E. Elias, A.C. Phillips, S.C. Odewahn, J.A. Baldwin, A.R. Walker, T. Williams, C.R. Sturch, F.K. Baganoff, B.C. Chaboyer, R.A. Schommer, H. Tirado, M. Hernandez, P. Ugarte, P. Guhathakurta, S.B. Howell, P. Szkody, P.C. Schmidtke, and J. Roth. *AJ*, **106**, 2392–2407, 1993.

17. Cold, Warm, and Hot Gas in the Late-Stage Merger NGC 7252. J.E. Hibbard, P. Guhathakurta, J.H. van Gorkom, and F. Schweizer. *AJ*, **107**, 67–89, 1994.

18. Globular Cluster Photometry with the *Hubble Space Telescope*. II. *U, V,* and *I* Measurements of M15. B. Yanny, P. Guhathakurta, J.N. Bahcall, and D.P. Schneider. *AJ*, **107**, 1745–1763, 1994.

19. Tests of the Tully-Fisher Relation. I. Scatter in Infrared Magnitude versus 21 cm Width. G. Bernstein, P. Guhathakurta, S. Raychaudhury, R. Giovanelli, M.P. Haynes, T. Herter, and N. Vogt. *AJ*, **107**, 1962–1976, 1994.

20. The Properties of an HI-Selected Galaxy Sample. A. Szomoru, P. Guhathakurta, J.H. van Gorkom, J.H. Knapen, D.H. Weinberg, and A.S. Fruchter. *AJ*, **108**, 491–506, 1994.

21. Detection of Lens Candidates for the Double Quasar Q2345 + 007. P. Fischer, J.A. Tyson, G. Bernstein, and P. Guhathakurta. *ApJL*, **431**, L71–74, 1994.

22. WFPC2 Observations of the Globular Cluster M30. B. Yanny, P. Guhathakurta, D.P. Schneider, and J.N. Bahcall. *ApJL*, **435**, L59–L62, 1994.

23. Globular Cluster Photometry with the *Hubble Space Telescope*. III. Blue Stragglers and Variable Stars in the Core of M3. P. Guhathakurta, B. Yanny, J.N. Bahcall, and D.P. Schneider. *AJ*, **108**, 1786–1809, 1994.

24. The Type Ia Supernova 1989B in NGC 3627 (M66). L.A. Wells, M.M. Phillips, N.B. Suntzeff, S.R. Heathcote, M. Hamuy, M. Navarrete, M. Fernandez, W.G. Weller, R.A. Schommer, R.P. Kirshner, B. Leibundgut, S.P. Willner, R. Peletier, E.M. Schlegel, J.C. Wheeler, R.P. Harkness, D.J. Bell, J.M. Matthews, A.V. Filippenko, J.C. Shields, M. Richmond, D. Jewitt, J. Luu, H.D. Tran, P.N. Appleton, E.I. Robson, J.A. Tyson, P. Guhathakurta, J.A. Eder, H.E. Bond, M. Potter, S. Veilleux, A.C. Porter, R.M. Humphreys, K.A. Janes, T.B. Williams, E. Costa, M.T. Ruiz, J.T. Lee, J.H. Lutz, R.M. Rich, P.F. Winkler, and N.D. Tyson. *AJ*, **108**, 2233–2250, 1994.

25. A Catalog of Digital Images of 113 Nearby Galaxies. Z. Frei, P. Guhathakurta, J.E. Gunn, and J.A. Tyson. *AJ*, **111**, 174–181, 1996.

26. Globular Cluster Photometry with the *Hubble Space Telescope*. V. WFPC2 Study of M15's Central Density Cusp. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. *AJ*, **111**, 267–282, 1996.

27. Stellar Variability in the Central Populations of 47 Tucanae from WF/PC Observations with the *Hubble Space Telescope*. II. Binary Systems. P.D. Edmonds, R.L. Gilliland, P. Guhathakurta, L.D. Petro, A. Saha, and M.M. Shara. *ApJ*, **468**, 241–260, 1996.

28. BVRI Light Curves for 29 Type Ia Supernovae. M. Hamuy, M.M. Phillips, N.B. Suntzeff, R.A. Schommer, J. Maza, R. Antezana, M. Wischnjewsky, G. Valladares, C. Muena, L.E. Gonzales, R. Aviles, L.A. Wells, R.C. Smith, M. Navarrete, R. Covarrubias, G.M. Williger, A.R. Walker, A.C. Layden, J.H. Elias, J.A. Baldwin, M. Hernandez, H. Tirado, P. Ugarte, R. Elston, N. Saavedra, F. Barrientos, E. Costa, P. Lira, M.T. Ruiz, C. Anguita, X. Gomez, P. Ortiz, M. Della Valle, J. Danziger, J. Storm, Y.-C. Kim, C. Bailyn, E.P. Rubenstein, D. Tucker, S. Cersosimo, R.A. Mendez, L. Siciliano, W. Sherry, B. Chaboyer, R.A. Koopmann, D. Geisler, A. Sarajedini, A. Dey, N.D. Tyson, R.M. Rich, R. Gal, R. Lamontagne, N. Caldwell, P. Guhathakurta, A.C. Phillips, P. Szkody, C. Prosser, L.C. Ho, R. McMahan, G. Baggley, K.-P. Cheng, R. Havlen, K. Wakamatsu, K. Janes, M. Malkan, F.K. Baganoff, P. Seitzer, M. Shara, C. Sturch, J. Hesser, A.N.P. Hartig, J. Hughes, D. Welch, T.B. Williams, H. Ferguson, P.J. Francis, L. French, M. Bolte, J. Roth, S. Odewahn, S. Howell, and W. Krzeminski. *AJ* , **112**, 2408–2437, 1996.

29. The Luminosity-Linewidth Relation as a Probe of the Evolution of Field Galaxies. P. Guhathakurta, K. Ing, H.-W. Rix, M.M. Colless, and T. Williams. *J. Kor. A. Soc.,* **29**, S63–S64, 1996.

30. Probing the Cores of Dense Globular Clusters with the *Hubble Space Telescope*. P. Guhathakurta. *J. Kor. A. Soc.,* **29**, S139–S140, 1996.

31. Globular Cluster Photometry with the *Hubble Space Telescope*. VI. WF/PC-I Observations of the Stellar Populations in the Core of M13. R.L. Cohen, P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. *AJ*, **13**, 669–681, 1997.

32. Internal Kinematics of Distant Field Galaxies. I. Emission Linewidths for a Complete Sample of Faint Blue Galaxies at $z \sim 0.25$. H.-W. Rix, P. Guhathakurta, M.M. Colless, and K. Ing. *MNRAS*, **285**, 779–792, 1997.

33. Tests of the Tully-Fisher Relation. II. Scatter Using Optical Rotation Curves. S. Raychaudhury, K. von Braun, G.M. Bernstein, and P. Guhathakurta. *AJ*, **113**, 2046–2053, 1997.

34. Optical Light Curves of the Type Ia Supernovae SN 1990N and SN 1991T. P. Lira, N.B. Suntzeff, M.M. Phillips, M. Hamuy, J. Maza, R.A. Schommer, R.C. Smith, L.A. Wells, R. Aviles, J.A. Baldwin, J.H. Elias, L. Gonzales, A. Layden, M. Navarrete, P. Ugarte, A.R. Walker, G.M. Williger, F.K. Baganoff, A.P.S. Crotts, R.M. Rich, N.D. Tyson, A. Dey, P. Guhathakurta, J. Hibbard, Y.-C. Kim, D.M. Rehner, E. Siciliano, J. Roth, P. Seitzer, and T.B. Williams. *AJ*, **115**, 234–246, 1998.

35. Optical Spectroscopy of Galactic Cirrus Clouds: Extended Red Emission in the Diffuse Interstellar Medium. A. Szomoru and P. Guhathakurta. *ApJL*, **494**, L93–L97, 1998.

36. Deep Optical Imaging of the Bright Seyfert Galaxy NGC 5548: A Long, Very Low Surface Brightness Tail. J.A. Tyson, P. Fischer, P. Guhathakurta, P. McIlroy, R. Wenk, J. Huchra, L. Macri, L. Neuschaefer, V. Sarajedini, K. Glazebrook, K. Ratnatunga, and R. Griffiths. *AJ*, **116**, 102–110, 1998.

37. Isolating Red Giant Stars in M31's Elusive Outer Spheroid. D.B. Reitzel, P. Guhathakurta, and A. Gould. *AJ*, **116**, 707–722, 1998.

38. Globular Cluster Photometry with the *Hubble Space Telescope*. VII. Color Gradients and Blue Stragglers in the Central Region of M30 from Wide Field Planetary Camera 2 Observations. P. Guhathakurta, Z.T. Webster, B. Yanny, D.P. Schneider, and J.N. Bahcall. *AJ*, **116**, 1757–1774, 1998.

39. Properties of Two New M31 Dwarf Spheroidal Companions from Keck Imaging. E.K. Grebel and P. Guhathakurta. *ApJL*, **511**, L101–L105, 1999.

40. Extinction Curves, Distances, and Clumpiness of Diffuse Interstellar Dust Clouds. A. Szomoru and P. Guhathakurta. *AJ*, **117**, 2226–2243, 1999.

41. An Extremely Lithium-Rich Bright Red Giant in the Globular Cluster M3. R.P. Kraft, R.C. Peterson, P. Guhathakurta, C. Sneden, J.P. Fulbright, and G.E. Langer. *ApJL*, **518**, L53–L56, 1999.

42. The Dwarf Spheroidal Galaxy DDO 44: Stellar Populations and Distance. I.D. Karachentsev, M.E. Sharina, E.K. Grebel, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **352**, 399–405, 1999.

43. Radial Color Gradient and Main-Sequence Mass Segregation in M30 (NGC 7099). J.H. Howell, P. Guhathakurta, and A. Tan. *AJ*. **119**, 1259–1267, 2000.

44. Magnitude Bias of Microlensed Sources Toward the Large Magellanic Cloud. H.S. Zhao, D.S. Graff, and P. Guhathakurta. *ApJL*, **532**, L37–L40, 2000.

45. Breaking the Disk/Halo Degeneracy with Gravitational Lensing. A.H. Maller, L. Simard, P. Guhathakurta, J. Hjorth, A.O. Jaunsen, R.A. Flores, and J.R. Primack. *ApJ*, **533**, 194–202, 2000.

46. Dynamical Mass Estimates for the Halo of M31 from Keck Spectroscopy. N.W. Evans, M.I. Wilkinson, P. Guhathakurta, E.K. Grebel, and S.S. Vogt. *ApJL*, **540**, L9–L12, 2000.

47. Resolving the Controversy Over the Core Radius of 47 Tucanae (NGC 104). J.H. Howell, P. Guhathakurta, and R.L. Gilliland. *PASP*, **112**, 1200–1211, 2000.

48. The Local Universe. I.D. Karachentsev, V.E. Karachentseva, W.K. Huchtmeier, E.K. Grebel, D. Geisler, P. Guhathakurta, P.W. Hodge, A. Sarajedini, P. Seitzer, and A.E. Dolphin. *Kinematika i Fizika Nebesnykh Tel*. **Sup. 3**, 121–124, 2000.

49. *Hubble Space Telescope* Photometry of the Dwarf Spheroidal Galaxy ESO 410–G005. I.D. Karachentsev, M.E. Sharina, E.K. Grebel, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *ApJ*, **542**, 128–136, 2000.

50. Dwarf Spheroidal Galaxies in the M81 Group Imaged with WFPC2. I.D. Karachentsev, V.E. Karachentseva, A.E. Dolphin, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, A. Sarajedini, P. Seitzer, and M.E. Sharina. *A&A*, **363**, 117–129, 2000.

51. A Lack of Planets in 47 Tucanae from a *Hubble Space Telescope* Search. R.L. Gilliland, T.M. Brown, P. Guhathakurta, A. Sarajedini, E.F. Milone, M.D. Albrow, N.R. Baliber, H. Bruntt, A. Burrows, D. Charbonneau, P. Choi, W.D. Cochran, P.D. Edmonds, S. Frandsen, J.H. Howell, D.N.C. Lin, G.W. Marcy, M. Mayor, D. Naef, S. Sigurdsson, C.R. Stagg, D.A. VandenBerg, S.S. Vogt, and M.D. Williams. *ApJL*, **545**, L47–L51, 2000.

52. SX Phoenicis Stars in the Core of 47 Tucanae. H. Bruntt, S. Frandsen, R.L. Gilliland, J. Christensen-Dalsgaard, J.O. Petersen, P. Guhathakurta, P.D. Edmonds, and G. Bono. *A&A*, **371**, 614–625, 2001.

53. The Type Ic SN 1990B in NGC 4568. A. Clocchiatti, N.B. Suntzeff, M.M. Phillips, A.V. Filippenko, M. Turatto, S. Benetti, E. Capellaro, R. Avilés, R. Covarrubias, K. DeGioia-Eastwood, M. Dickinson, C. Goiffes, P. Guhathakurta, M. Hamuy, S.R. Heathcote, B. Leibundgut, T. Matheson, M. Navarrete, M. Perez, A. Phillips, A. Piemonte, M.T. Ruiz, J.C. Shields, C. Smith, H. Spinrad, C.R. Sturch, J.A. Tyson, and L. Wells. *ApJ*, **553**, 886–896, 2001.

54. The Stellar Content and Distance of UGC 4483. A.E. Dolphin, L. Makarova, I.D. Karachentsev, V.E. Karachentseva, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, A. Sarajedini, and P. Seitzer. *MNRAS*, **324**, 249–256, 2001.

55. WFPC2 Observations of Two Dwarf Spheroidal Galaxies in the M81 Group. I.D. Karachentsev, M.E. Sharina, A.E. Dolphin, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **375**, 359–365, 2001.

56. The Frequency of Binaries in the Core of 47 Tucanae. M.D. Albrow, R.L. Gilliland, T.M. Brown, P.D. Edmonds, P. Guhathakurta, and A. Sarajedini. *ApJ*, **559**, 1060–1081, 2001.

57. A New Galaxy Near the Local Group in Draco. I.D. Karachentsev, M.E. Sharina, A.E. Dolphin, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **379**, 407–411, 2001.

58. Population Gradients in Local Group Dwarf Spheroidal Galaxies. D. Harbeck, E.K. Grebel, J. Holtzman, P. Guhathakurta, W. Brandner, D. Geisler, A. Sarajedini, A. Dolphin, D. Hurley-Keller, and M. Mateo. *AJ*, **122**, 3092–3105, 2001.

59. The M81 Group of Galaxies: New Distances, Kinematics and Structure. I.D. Karachentsev, A.E. Dolphin, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, P. Seitzer, and M.E. Sharina. *A&A*, **383**, 125–136, 2002.

60. The Stellar Populations of the Cetus Dwarf Spheroidal Galaxy. A. Sarajedini, E.K. Grebel, A.E. Dolphin, P. Seitzer, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and M.E. Sharina. *ApJ*, **567**, 915–921, 2002.

61. New Distances to Galaxies in the Centaurus A Group. I.D. Karachentsev, M.E. Sharina, A.E. Dolphin, E.K. Grebel, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **385**, 21–31, 2002.

62. Interpreting the Morphology of Diffuse Light Around Satellite Galaxies. K.V. Johnston, P.I. Choi, and P. Guhathakurta. *AJ*, **124**, 127–146, 2002.

63. Metallicity and Kinematics of M31's Outer Stellar Halo from a Keck Spectroscopic Survey. D.B. Reitzel and P. Guhathakurta. *AJ*, **124**, 234–265, 2002.

64. Tidal Interaction of M32 and NGC 205 with M31: Surface Photometry and Numerical Simulations. P.I. Choi, P. Guhathakurta, and K.V. Johnston. *AJ*, **124**, 310–331, 2002.

65. The Very Local Hubble Flow. I.D. Karachentsev, M.E. Sharina, D.I. Makarov, A.E. Dolphin, E.K. Grebel, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **389**, 812–824, 2002.

66. Internal Dynamics, Structure and Formation of Dwarf Elliptical Galaxies: I. A Keck/*Hubble Space Telescope* Study of Six Virgo Cluster Dwarfs. M. Geha, P. Guhathakurta, and R. van der Marel. *AJ*, **124**, 3073–3087, 2002.

67. *Hubble Space Telescope* Evidence for an Intermediate-Mass Black Hole in the Globular Cluster M15.I. STIS Spectroscopy and WFPC2 Photometry. R.P. van der Marel, J. Gerssen, P. Guhathakurta, R.C. Peterson, and K. Gebhardt. *AJ*, **124**, 3255–3269, 2002.

68. *Hubble Space Telescope* Evidence for an Intermediate-Mass Black Hole in the Globular Cluster M15. II. Kinematical Analysis and Dynamical Modeling. J. Gerssen, R.P. van der Marel, K. Gebhardt, P. Guhathakurta, R.C. Peterson, and C. Pryor. *AJ*, **124**, 3270–3288, 2002.

69. Tidal Dwarfs in the M81 Group: The Second Generation? L.N. Makarova, E.K. Grebel, I.D. Karachentsev, A.E. Dolphin, V.E. Karachentseva, M.E. Sharina, D. Geisler, P. Guhathakurta, P.W. Hodge, A. Sarajedini, and P. Seitzer. *A&A*, **396**, 473–487, 2002.

70. Tidal Dwarfs in the M81 Group: The Second Generation? L. Makarova, E. Grebel, I. Karachentsev, A. Dolphin, V. Karachentseva, M. Sharina, D. Geisler, P. Guhathakurta, P. Hodge, A. Sarajedini, and P. Seitzer. *Ap. & Sp. Sci.*, **285**, 107–111, 2003.

71. An HI Survey of Clusters in the Local Universe. J.H. van-Gorkom, H. Bravo-Alfaro, K.S. Dwarakanath, P. Guhathakurta, B.M. Poggianti, D. Schminovich, M. Valluri, M. Verheijen, E. Wilcots, and A. Zabludoff. *Ap. & Sp. Sci.*, **285**, 219–224, 2003.

72. Galaxy Flow in the Canes Venatici I Cloud. I.D. Karachentsev, M.E. Sharina, A.E. Dolphin, E.K. Grebel, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **398**, 467–477, 2003.

73. Local Galaxy Flows within 5 Mpc. I.D. Karachentsev, D.I. Makarov, M.E. Sharina, A.E. Dolphin, E.K. Grebel, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **398**, 479–491, 2003.

74. A Population of Intergalactic Supernovae in Galaxy Clusters. A. Gal-Yam, D. Maoz, P. Guhathakurta, and A.V. Filippenko. *AJ*, **125**, 1087–1094, 2003.

75. Distances to Nearby Galaxies in Sculptor. I.D. Karachentsev, E.K. Grebel, M.E. Sharina, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *A&A*, **404**, 93–111, 2003.

76. Internal Dynamics, Structure, and Formation of Dwarf Elliptical Galaxies: II. Rotating Versus Nonrotating Dwarfs. M. Geha, P. Guhathakurta, and R.P. van der Marel. *AJ*, **126**, 1794–1810, 2003.

77. The DEEP2 Galaxy Redshift Survey: Spectral Classification of Galaxies at $z \sim 1$. D.S. Madgwick, A.L. Coil, C.J. Conselice, M.C. Cooper, M. Davis, R.S. Ellis, S.M. Faber, D.P. Finkbeiner, B. Gerke, P. Guhathakurta, N. Kaiser, D.C. Koo, J.A. Newman, A.C. Phillips, C.C. Steidel, B.J. Weiner, C.N.A. Willmer, and R. Yan. *ApJ*, **599**, 997–1005, 2003.

78. Keck Spectroscopy of Red Giant Stars in the Vicinity of M31's Massive Globular Cluster G1. D.B. Reitzel, P. Guhathakurta, and R.M. Rich. *AJ*, **127**, 2133–2138, 2004.

79. Deep Photometry in a Remote M31 Major Axis Field Near G1. R.M. Rich, D.B. Reitzel, P. Guhathakurta, K. Gebhardt, and L.C. Ho. *AJ*, **127**, 2139–2144, 2004.

80. The Chemical Composition Contrast Between M3 and M13 Revisited: New Abundances for 28 Giant Stars in M3. C. Sneden, R.P. Kraft, P. Guhathakurta, R.C. Peterson, and J.P. Fulbright. *AJ*, **127**, 2162–2184, 2004.

81. Measuring the Slope of the Dust Extinction Law and the Power Spectrum of Dust Clouds Using Differentially Reddened Globular Clusters. J. Melbourne, and P. Guhathakurta. *AJ*, **128**, 271–286, 2004.

82. The DEEP2 Galaxy Redshift Survey: Clustering of Galaxies in Early Data. A.L. Coil, M. Davis, D.S. Madgwick, J.A. Newman, C.J. Conselice, M. Cooper, R.S. Ellis, S.M. Faber, D.P. Finkbeiner, P. Guhathakurta, N. Kaiser, D.C. Koo, A.C. Phillips, C.C. Steidel, B.J. Weiner, C.N.A. Willmer, and R. Yan, and the DEEP2 Survey Team. *ApJ*, **609**, 525–538, 2004.

83. Detection of the Main-Sequence Turnoff of a Newly Discovered Milky Way Halo Structure in the Triangulum-Andromeda Region. S.R. Majewski, J.C. Ostheimer, H.J. Rocha-Pinto, R.J. Patterson, P. Guhathakurta, and D. Reitzel. *ApJ*, **615**, 738–743, 2004.

84. The DEEP2 Galaxy Redshift Survey: Evolution of Close Galaxy Pairs and Major-Merger Rates up to $z \sim 1.2$. L. Lin, D.C. Koo, C.N.A. Willmer, D.R. Patton, C.J. Conselice, R. Yan, A.L. Coil, M.C. Cooper, M. Davis, S.M. Faber, B.F. Gerke, P. Guhathakurta, and J.A. Newman. *ApJL*, **617**, L9–L12, 2004.

85. Stellar Cluster Fiducial Sequences with the Advanced Camera for Surveys. T.M. Brown, H.C. Ferguson, E. Smith, P. Guhathakurta, R.A. Kimble, A.V. Sweigart, A. Renzini, R.M. Rich, and D.A. VandenBerg. *AJ*, **130**, 1693–1706, 2005.

86. NGC 770: A Counterrotating Core in a Low-Luminosity Elliptical Galaxy. M. Geha, P. Guhathakurta, and R.P. van der Marel. *AJ*, **129**, 2617–2627, 2005.

87. The DEEP2 Galaxy Redshift Survey: First Results on Galaxy Groups. B.F. Gerke, J.A. Newman, M. Davis, C. Marinoni, R. Yan, A.L. Coil, C. Conroy, M.C. Cooper, S.M. Faber, D.P. Finkbeiner, P. Guhathakurta, N. Kaiser, D.C. Koo, A.C. Phillips, B.J. Weiner, and C.N.A. Willmer. *ApJ*, **625**, 6–22, 2005.

88. The DEEP2 Galaxy Redshift Survey: Discovery of Luminous, Metal-poor Star-forming Galaxies at Redshifts $z \sim 0.7$. C. Hoyos, D.C. Koo, A.C. Phillips, C.N.A. Willmer, and P. Guhathakurta. *ApJL*, **635**, L21–L24, 2005.

89. Deep Photometry of Andromeda Reveals Striking Similarities in the Tidal Stream and Spheroid Populations. T.M. Brown, E. Smith, P. Guhathakurta, R.M. Rich, H.C. Ferguson, A. Renzini, A.V. Sweigart, and R.A. Kimble. *ApJL*, **636**, L89–L92, 2006.

90. The Detailed Star Formation History in the Spheroid, Outer Disk, and Tidal Stream of the Andromeda Galaxy. T.M. Brown, E. Smith, H.C. Ferguson, R.M. Rich, P. Guhathakurta, A. Renzini, A.V. Sweigart, and R.A. Kimble. *ApJ*, **652**, 323–353, 2006.

91. The DEEP2 Galaxy Redshift Survey: Clustering of Groups and Group Galaxies at $z \sim 1$. A.L. Coil, B.F. Gerke, J.A. Newman, C.-P. Ma, R. Yan, M.C. Cooper, M. Davis, S.M. Faber, P. Guhathakurta, and D.C. Koo. *ApJ*, **638**, 668–685, 2006.

92. The DEEP2 Galaxy Redshift Survey: The Relationship Between Galaxy Properties and Environment at $z \sim 1$. M.C. Cooper, J.A. Newman, D.J. Croton, B.J. Weiner, C.N.A. Willmer, B.F. Gerke, D.S. Madgwick, S.M. Faber, M. Davis, A.L. Coil, D.P. Finkbeiner, P. Guhathakurta, and D.C. Koo. *MNRAS*, **370**, 198–212, 2006.

93. Investigating the Andromeda Stream. II. Orbital Fits and Properties of the Progenitor. M.A. Fardal, A. Babul, J.J. Geehan, and P. Guhathakurta. *MNRAS*, **366**, 1012–1028, 2006.

94. Dynamics and Stellar Content of the Giant Southern Stream in M31. II. Interpretation. A.S. Font, K.V. Johnston, P. Guhathakurta, S.R. Majewski, and R.M. Rich. *AJ*, **131**, 1436–1444, 2006.

95. Investigating the Andromeda Stream—I. Simple Analytic Bulge-Disc-Halo Model for M31. J.J. Geehan, M.A. Fardal, A. Babul, and P. Guhathakurta. *MNRAS*, **366**, 996–1011, 2006.

96. Local Group Dwarf Elliptical Galaxies. I. Mapping the Dynamics of NGC 205 Beyond the Tidal Radius. M. Geha, P. Guhathakurta, R.M. Rich, and M.C. Cooper. *AJ*, **131**, 332–342, 2006.

97. A New Method for Isolating M31 Red Giant Stars: The Discovery of Stars out to a Radial Distance of 165 kpc. K.M. Gilbert, P. Guhathakurta, J.S. Kalirai, R.M. Rich, S.R. Majewski, J.C. Ostheimer, D.B. Reitzel, A.J. Cenarro, M.C. Cooper, C. Luine, and R.J. Patterson. *ApJ*, **652**, 1188–1212, 2006.

98. Dynamics and Stellar Content of the Giant Southern Stream in M31. I. Keck Spectroscopy of Red Giant Stars. P. Guhathakurta, R.M. Rich, D.B. Reitzel, M.C. Cooper, K.M. Gilbert, S.R. Majewski, J.C. Ostheimer, M.C. Geha, K.V. Johnston, and R.J. Patterson. *AJ*, **131**, 2497–2513, 2006.

99. Kinematics and Metallicity of M31 Red Giants: The Giant Southern Stream and Discovery of a Second Cold Component at R = 20 kpc. J.S. Kalirai, P. Guhathakurta, K.M. Gilbert, D.B. Reitzel, S.R. Majewski, R.M. Rich, and M.C. Cooper. *ApJ*, **641**, 268–280, 2006.

100. The Metal-poor Halo of the Andromeda Spiral Galaxy (M31). J.S. Kalirai, K.M. Gilbert, P. Guhathakurta, S.R. Majewski, J.C. Ostheimer, R.M. Rich, M.C. Cooper, D.B. Reitzel, and R.J. Patterson. *ApJ*, **648**, 389–404, 2006.

101. Tracing the Dynamical History of the Globular Cluster 47 Tucanae. E. Monkman, A. Sills, J. Howell, P. Guhathakurta, F. de Angeli, and G. Beccari. *ApJ*, **650**, 195–202, 2006.

102. On the Incidence of Strong Mg II Absorbers along Gamma-Ray Burst Sight Lines. G.E. Prochter, J.X. Prochaska, H.-W. Chen, J.S. Bloom, M. Dessauges-Zavadsky, R.J. Foley, S. Lopez, M. Pettini, A.K. Dupree, and P. Guhathakurta. *ApJL*, **648**, L93–L96, 2006.

103. The Deep Evolutionary Exploratory Probe 2 Galaxy Redshift Survey: The Galaxy Luminosity Function to $z \sim 1$. C.N.A. Willmer, S.M. Faber, D.C. Koo, B.J. Weiner, J.A. Newman, A.L. Coil, A.J. Connolly, C. Conroy, M.C. Cooper, M. Davis, D.P. Finkbeiner, B.F. Gerke, P. Guhathakurta, J. Harker, N. Kaiser, S. Kassin, N.P. Konidaris, L. Lin, G. Luppino, D.S. Madgwick, K.G. Noeske, A.C. Phillips, and R. Yan. *ApJ*, **647**, 853–873, 2006.

104. AEGIS: Enhancement of Dust-enshrouded Star Formation in Close Galaxy Pairs and Merging Galaxies up to $z \sim 1$. L. Lin, D.C. Koo, B.J. Weiner, T. Chiueh, A.L. Coil, J. Lotz, C.J. Conselice, S.P. Willner, H.A. Smith, P. Guhathakurta, J.-S. Huang, E. Le Floc'h, K.G. Noeske, C.N.A. Willmer, M.C. Cooper, and A.C. Phillips. *ApJ*, **660**, L51-L54, 2007.

105. The DEEP2 Galaxy Redshift Survey: Evolution of the Colour-density Relation at $0.4 < z < 1.35$. M.C. Cooper, J.A. Newman, A.L. Coil, D.J. Croton, B.F. Gerke, R. Yan, M. Davis, S.M. Faber, P. Guhathakurta, D.C. Koo, B.J. Weiner, and C.N.A. Willmer. *MNRAS*, **376**, 1445–1459, 2007.

106. The DEEP2 Galaxy Redshift Survey: Redshift Identification of Single-Line Emission Galaxies. E.N. Kirby, P. Guhathakurta, S.M. Faber, D.C. Koo, B.J. Weiner, and M.C. Cooper. *ApJ*, **660**, 62–71, 2007.

107. Supernovae in Low-Redshift Galaxy Clusters: The Type Ia Supernova Rate. K. Sharon, A. Gal-Yam, D. Maoz, A.V. Filippenko, and P. Guhathakurta. *ApJ*, **660**, 1165–1175, 2007.

108. The All-Wavelength Extended Groth Strip International Survey (AEGIS) Data Sets. M. Davis, P. Guhathakurta, N.P. Konidaris, J.A. Newman, M.L.N. Ashby, A.D. Biggs, P. Barmby, K. Bundy, S.C. Chapman, A.L. Coil, C.J. Conselice, M.C. Cooper, D.J. Croton, P.R.M. Eisenhardt, R.S. Ellis, S.M. Faber, T. Fang, G.G. Fazio, A. Georgakakis, B.F. Gerke, W.M. Goss, S. Gwyn, J. Harker, A.M. Hopkins, J.-S. Huang, R.J. Ivison, S.A. Kassin, E.N. Kirby, A.M. Koekemoer, D.C. Koo, E.S. Laird, E. Le Floc'h, L. Lin, J.M. Lotz, P.J. Marshall, D.C. Martin, A.J. Metevier, L.A. Moustakas, K. Nandra, K.G. Noeske, C. Papovich, A.C. Phillips, R.M. Rich, G.H. Rieke, D. Rigopoulou, S. Salim, D. Schiminovich, L. Simard, I. Smail, T.A. Small, B.J. Weiner, C.N.A. Willmer, S.P. Willner, G. Wilson, E.L. Wright, and R. Yan. *ApJ*, **660**, L1–L6, 2007.

109. AEGIS: Galaxy Spectral Energy Distributions from the X-Ray to Radio. N.P. Konidaris, P. Guhathakurta, K. Bundy, A.L. Coil, C.J. Conselice, M.C. Cooper, P.R.M. Eisenhardt, J.-S. Huang, R.J. Ivison, S.A. Kassin, E.N. Kirby, J.M. Lotz, J.A. Newman, K.G. Noeske, R.M. Rich, T.A. Small, C.N.A. Willmer, and S.P. Willner. *ApJ*, **660**, L7–L10, 2007.

110. The DEEP2 Galaxy Redshift Survey: AEGIS Observations of a Dual AGN at $z = 0.7$. B.F. Gerke, J.A. Newman, J. Lotz, R. Yan, P. Barmby, A.L. Coil, C.J. Conselice, R.J. Ivison, L. Lin, D.C. Koo, K. Nandra, S. Salim, T. Small, B.J. Weiner, M.C. Cooper, M. Davis, S.M. Faber, and P. Guhathakurta. *ApJ*, **660**, L23–L26, 2007.

111. A Strong-Lens Survey in AEGIS: The Influence of Large-Scale Structure. L.A. Moustakas, P. Marshall, J.A. Newman, A.L. Coil, M.C. Cooper, M. Davis, C.D. Fassnacht, P. Guhathakurta, A. Hopkins, A. Koekemoer, N.P. Konidaris, J.M. Lotz, and C.N.A. Willmer. *ApJ*, **660**, L31–L34, 2007.

112. Star Formation in AEGIS Field Galaxies since $z = 1.1$: The Dominance of Gradually Declining Star Formation, and the Main Sequence of Star-forming Galaxies. K.G. Noeske, B.J. Weiner, S.M. Faber, C. Papovich, D.C. Koo, R.S. Somerville, K. Bundy, C.J. Conselice, J.A. Newman, D. Schiminovich, E. Le Floc'h, A.L. Coil, G.H. Rieke, J.M. Lotz, J.R. Primack, P. Barmby, M.C. Cooper, M. Davis, R.S. Ellis, G.G. Fazio, P. Guhathakurta, J. Huang, S.A. Kassin, D.C. Martin, A.C. Phillips, R.M. Rich, T.A. Small, C.N.A. Willmer, and G. Wilson. *ApJ*, **660**, L43–L46, 2007.

113. The DEEP2 Galaxy Redshift Survey: The Evolution of the Blue Fraction in Groups and the Field. B.F. Gerke, J.A. Newman, S.M. Faber, M.C. Cooper, D.J. Croton, M. Davis, C.N.A. Willmer, R. Yan, A.L. Coil, P. Guhathakurta, D.C. Koo, and B.J. Weiner. *MNRAS*, **376**, 1425–1444, 2007.

114. The Extended Star Formation History of the Andromeda Spheroid at 21 kpc on the Minor Axis. T.M. Brown, E. Smith, H.C. Ferguson, P. Guhathakurta, J.S. Kalirai, R.M. Rich, A. Renzini, A.V. Sweigart, D. Reitzel, K.M. Gilbert, and M. Geha. *ApJ*, **658**, L95–L98, 2007.

115. Unveiling the Boxy Bulge and Bar of the Andromeda Spiral Galaxy. R.L. Beaton, S.R. Majewski, P. Guhathakurta, M.F. Skrutskie, R.M. Cutri, J. Good, R.J. Patterson, E. Athanassoula, and M. Bureau. *ApJ*, **658**, L91–L94, 2007.

116. Evolution in the Halo Masses of Isolated Galaxies between $z \sim 1$ and $z \sim 0$: From DEEP2 to SDSS. C. Conroy, F. Prada, J.A. Newman, D. Croton, A.L. Coil, C.J. Conselice, M.C. Cooper, M. Davis, S.M. Faber, B.F. Gerke, P. Guhathakurta, A. Klypin, D.C. Koo, and R. Yan. *ApJ*, **654**, 153–171, 2007.

117. Exploring Halo Substructure with Giant Stars. X. Extended Dark Matter or Tidal Disruption?: The Case for the Leo I Dwarf Spheroidal Galaxy. S.T. Sohn, S.R. Majewski, R.R. Muñoz, W.E. Kunkel, K.V. Johnston, J.C. Ostheimer, P. Guhathakurta, R.J. Patterson, M.H. Siegel, and M.C. Cooper. *ApJ*, **663**, 960–989, 2007.

118. Galaxy Luminosity Functions to $z \sim 1$ from DEEP2 and COMBO-17: Implications for Red Galaxy Formation. S.M. Faber, C.N.A. Willmer, C. Wolf, D.C. Koo, B.J. Weiner, J.A. Newman, M. Im, A.L. Coil, C. Conroy, M.C. Cooper, M. Davis, D.P. Finkbeiner, B.F. Gerke, K. Gebhardt, E.J. Groth, P. Guhathakurta, J. Harker, N. Kaiser, S. Kassin, M. Kleinheinrich, N.P. Konidaris, R.G. Kron, L. Lin, G. Luppino, D.S. Madgwick, K. Meisenheimer, K.G. Noeske, A.C. Phillips, V.L. Sarajedini, R.P. Schiavon, L. Simard, A.S. Szalay, N.P. Vogt, and R. Yan. *ApJ*, **665**, 265–294, 2007.

119. The Sextet Arcs: A Strongly Lensed Lyman Break Galaxy in the ACS Spectroscopic Galaxy Survey toward Abell 1689. B.L. Frye, D. Coe, D.V. Bowen, N. Benítez, T. Broadhurst, P. Guhathakurta, G. Illingworth, F. Menanteau, K. Sharon, R. Lupton, G. Meylan, K. Zekser, G. Meurer, and M. Hurley. *ApJ*, **665**, 921–935, 2007.

120. Investigating the Andromeda Stream: III. A Young Shell System in M31. M.A. Fardal, P. Guhathakurta, A. Babul, and A.W. McConnachie. *MNRAS*, **380**, 15–32, 2007.

121. Stellar Kinematics in the Complicated Inner Spheroid of M31: Discovery of Substructure along the Southeastern Minor Axis and Its Relationship to the Giant Southern Stream. K.M. Gilbert, M. Fardal, J.S. Kalirai, P. Guhathakurta, M.C. Geha, J. Isler, S.R. Majewski, J.C. Ostheimer, R.J. Patterson, D.B. Reitzel, E. Kirby, and M.C. Cooper. *ApJ,* **668**, 245–267, 2007.

122. Discovery of Andromeda XIV: A Dwarf Spheroidal Dynamical Rogue in the Local Group? S.R. Majewski, R.L. Beaton, R.J. Patterson, J.S. Kalirai, M.C. Geha, R.R. Muñoz, M.S. Seigar, P. Guhathakurta, K.M. Gilbert, R.M. Rich, J.S. Bullock, and D.B. Reitzel. *ApJL,* **670**, L9–L12, 2007.

123. The DEEP2 Redshift Survey: Lyα Emitters in the Spectroscopic Database. M. Sawicki, B.C. Lemaux, P. Guhathakurta, E.N. Kirby, N.P. Konidaris, C.L. Martin, M.C. Cooper, D.C. Koo, J.A. Newman, and B.J. Weiner. *ApJ,* **687**, 884–898, 2008.

124. The Evolution of Galaxy Mergers and Morphology at $z < 1.2$ in the Extended Groth Strip. J.M. Lotz, M. Davis, S.M. Faber, P. Guhathakurta, S. Gwyn, J. Huang, D.C. Koo, E. Le Floc'h, L. Lin, J. Newman, K. Noeske, C. Papovich, C.N.A. Willmer, A. Coil, C.J. Conselice, M. Cooper, A.M. Hopkins, A. Metevier, J. Primack, G. Rieke, and B.J. Weiner. *ApJ,* **672**, 177–197, 2008.

125. The Stellar Content of Galaxy Halos: A Comparison between λCDM Models and Observations of M31. A.S. Font, K.V. Johnston, A.M.N. Ferguson, J.S. Bullock, B.E. Robertson, J. Tumlinson, and P. Guhathakurta. *ApJ,* **673**, 215–225, 2008.

126. The DEEP2 Galaxy Redshift Survey: the role of galaxy environment in the cosmic star formation history. M.C. Cooper, J.A. Newman, B.J. Weiner, R. Yan, C.N.A. Willmer, K. Bundy, A.L. Coil, C.J. Conselice, M. Davis, S.M. Faber, B.F. Gerke, P. Guhathakurta, D.C. Koo, and K.G. Noeske. *MNRAS,* **383**, 1058–1078, 2008.

127. M31 Transverse Velocity and Local Group Mass from Satellite Kinematics. R.P. van der Marel, and P. Guhathakurta. *ApJ,* **678**, 187–199, 2008.

128. Supernovae in Low-Redshift Galaxy Clusters: Observations by the Wise Observatory Optical Transient Search (WOOTS). A. Gal-Yam, D. Maoz, P. Guhathakurta, and A.V. Filippenko. *ApJ,* **680**, 550–567, 2008.

129. Was the Andromeda Stream Produced by a Disk Galaxy? M.A. Fardal, A. Babul, P. Guhathakurta, K.M. Gilbert, and C. Dodge. *ApJL,* **682**, L33–L36, 2008.

130. Metallicity and Alpha-Element Abundance Measurement in Red Giant Stars from Medium-Resolution Spectra. E.N. Kirby, P. Guhathakurta, and C. Sneden. *ApJ,* **682**, 1217–1233, 2008.

131. Darwin Tames an Andromeda Dwarf: Unraveling the Orbit of NGC 205 Using a Genetic Algorithm. K.M. Howley, M. Geha, P. Guhathakurta, R.M. Montgomery, G. Laughlin, and K.V. Johnston. *ApJ,* **683**, 722–749, 2008.

132. Observations of the Gas Reservoir around a Star-Forming Galaxy in the Early Universe. B.L. Frye, D.V. Bowen, M. Hurley, T.M. Tripp, X. Fan, B. Holden, P. Guhathakurta, D. Coe, T. Broadhurst, E. Egami, and G. Meylan. *ApJL,* **685**, L5–L8, 2008.

133. Uncovering Extremely Metal-Poor Stars in the Milky Way's Ultrafaint Dwarf Spheroidal Satellite Galaxies. E.N. Kirby, J.D. Simon, M. Geha, P. Guhathakurta, and A. Frebel. *ApJL,* **685**, L43–L46, 2008.

134. The Extended Star Formation History of the Andromeda Spheroid at 35 kpc on the Minor Axis. T.M. Brown, R. Beaton, M. Chiba, H.C. Ferguson, K.M. Gilbert, P. Guhathakurta, M. Iye, J.S. Kalirai, A. Koch, Y. Komiyama, S.R. Majewski, D.B. Reitzel, A. Renzini, R.M. Rich, E. Smith, A.V. Sweigart, and M. Tanaka. *ApJL,* **685**, L121–L124, 2008.

135. AEGIS-X: the *Chandra* Deep Survey of the Extended Groth Strip. E.S. Laird, K. Nandra, A. Georgakakis, J.A. Aird, P. Barmby, C.J. Conselice, A.L. Coil, M. Davis, S.M. Faber, G.G. Fazio, P. Guhathakurta, D.C. Koo, V. Sarajedini, and C.N.A. Willmer. *ApJS,* **180**, 102–116, 2009.

136. Mixed Populations in Globular Clusters: Et Tu, 47 Tuc? J. Anderson, G. Piotto, I.R. King, L.R. Bedin, and P. Guhathakurta. *ApJL,* **697**, L58–L62, 2009.

137. The Dominance of Metal-rich Streams in Stellar Halos: A Comparison Between Substructure in M31 and λCDM Models. K.M. Gilbert, A.S. Font, K.V. Johnston, and P. Guhathakurta. *ApJ,* **701**, 776–786, 2009.

138. Deep Optical Photometry of Six Fields in the Andromeda Galaxy. T.M. Brown, E. Smith, H.C. Ferguson, P. Guhathakurta, J.S. Kalirai, R.A. Kimble, A. Renzini, R.M. Rich, A.V. Sweigart, and D.A. Vanden Berg. *ApJS,* **184**, 152–157, 2009.

139. A survey of ultraviolet-bright sources behind the halo of M31. A. Fittingoff, J.X. Prochaska, J.S. Kalirai, J. Strader, P. Guhathakurta, and K.F. Kaplan. *MNRAS,* **399**, 728–736, 2009.

140. Multi-element Abundance Measurements from Medium-resolution Spectra. I. The Sculptor Dwarf Spheroidal Galaxy. E.N. Kirby, P. Guhathakurta, M. Bolte, C. Sneden, and M.C. Geha. *ApJ,* **705**, 328–346, 2009.

141. The SPLASH Survey: A Spectroscopic Analysis of the Metal-Poor, Low-Luminosity M31 dSph Satellite Andromeda X. J.S. Kalirai, D.B. Zucker, P. Guhathakurta, M. Geha, A.Y. Kniazev, D. Martínez-Delgado, E.F. Bell, E.K. Grebel, and K.M. Gilbert. *ApJ,* **705**, 1043–1055, 2009.

142. The SPLASH Survey: A Spectroscopic Portrait of Andromeda's Giant Southern Stream. K.M. Gilbert, P. Guhathakurta, P. Kollipara, R.L. Beaton, M.C. Geha, J.S. Kalirai, E.N. Kirby, S.R. Majewski, and R.J. Patterson. *ApJ,* **705**, 1275–1297, 2009.

143. Structure and Population of the Andromeda Stellar Halo from a Subaru/Suprime-Cam Survey. M. Tanaka, M. Chiba, Y. Komiyama, P. Guhathakurta, J.S. Kalirai, and M. Iye. *ApJ,* **708**, 1168–1203, 2010.

144. Local Group Dwarf Elliptical Galaxies. II. Stellar Kinematics to Large Radii in NGC 147, and NGC 185. M. Geha, R.P. van der Marel, P. Guhathakurta, K.M. Gilbert, J. Kalirai, and E.N. Kirby. *ApJ,* **711**, 361–373, 2010.

145. The SPLASH Survey: Internal Kinematics, Chemical Abundances, and Masses of the Andromeda I, II, III, VII, X, and XIV Dwarf Spheroidal Galaxies. J.S. Kalirai, R.L. Beaton, M.C. Geha, K.M. Gilbert, P. Guhathakurta, E.N. Kirby, S.R. Majewski, J.C. Ostheimer, R.J. Patterson, and J. Wolf. *ApJ,* **711**, 671–692, 2010.

146. Where do Wet, Dry, and Mixed Galaxy Mergers Occur? A Study of the Environments of Close Galaxy Pairs in the DEEP2 Galaxy Redshift Survey. L. Lin, M.C. Cooper, H.-Y. Jian, D.C. Koo, D.R. Patton, R. Yan, C.N.A. Willmer, A.L. Coil, T. Chiueh, D.J. Croton, B.F. Gerke, J. Lotz, P. Guhathakurta, and J.A. Newman. *ApJ,* **718**, 1158–1170, 2010.

147. Absence of Evidence Is Not Evidence of Absence: The Color-Density Relation at Fixed Stellar Mass Persists to $z \sim 1$. M.C. Cooper, A.L. Coil, B.F. Gerke, J.A. Newman, K. Bundy, C.J. Conselice, D.J. Croton, M. Davis, S.M. Faber, P. Guhathakurta, D.C. Koo, L. Lin, B.J. Weiner, C.N.A. Willmer, and R. Yan. *MNRAS,* **409**, 337–345, 2010.

148. Multi-Element Abundance Measurements from Medium-Resolution Spectra. II. Catalog of Stars in Milky Way Dwarf Satellites Galaxies. E.N. Kirby, P. Guhathakurta, J.D. Simon, M.C. Geha, C.M. Rockosi, C. Sneden, J.G. Cohen, S.T. Sohn, S.R. Majewski, and M. Siegel. *ApJS,* **191**, 352–375, 2010.

149. Multi-Element Abundance Measurements from Medium-Resolution Spectra. III. Metallicity Distributions of Milky Way Dwarf Satellites Galaxies. E.N. Kirby, G.A. Lanfranchi, J.D. Simon, J.G. Cohen, and P. Guhathakurta. *ApJ,* **727**, #78, 2011.

150. Multi-Element Abundance Measurements from Medium-Resolution Spectra. IV. Alpha Element Distributions in Milky Way Dwarf Satellites Galaxies. E.N. Kirby, J.G. Cohen, G.H. Smith, S.R. Majewski, S.T. Sohn, and P. Guhathakurta. *ApJ,* **727**, #79, 2011.

151. Extragalactic Background Light Inferred from AEGIS Galaxy SED-type Fractions. A. Domínguez, J.R. Primack, D.J. Rosario, F. Prada, R.C. Gilmore, S.M. Faber, D.C. Koo, R.S. Somerville, M.A. Pérez-Torres, P. Pérez-González, J.-S. Huang, M. Davis, P. Guhathakurta, P. Barmby, C.J. Conselice, J.A. Newman, M.C. Cooper and M. Lozano. *MNRAS,* **410**, 2556–2578, 2011.

152. HST/ACS Observations of RR Lyrae Stars in Six Ultra-deep Fields of M31. E.J. Jeffery, E. Smith, T.M. Brown, A.V. Sweigart, J.S. Kalirai, H.C. Ferguson, P. Guhathakurta, A. Renzini, and R.M. Rich. *AJ,* **141**, #171, 2011.

153. Structure and Population of the NGC55 Stellar Halo from a Subaru/Suprime-Cam Survey. M. Tanaka, M. Chiba, Y. Komyama, P. Guhathakurta, and J.S. Kalirai. *ApJ,* **738**, #150, 2011.

154. The Luminosity Profile and Structural Parameters of the Andromeda Galaxy. S. Courteau, L.M. Widrow, M. McDonald, P. Guhathakurta, K.M. Gilbert, Y. Zhu, R.L. Beaton, and S.R. Majewski. *ApJ,* **739**, #20, 2011.

155. Very Early Ultraviolet and Optical Observations of the Type Ia Supernova 2009ig. R.J. Foley, P.J. Challis, A.V. Filippenko, M. Ganeshalingam, W. Landsman, W. Li, G.H. Marion, J.M. Silverman, R.L. Beaton, V.N. Bennert, S.B. Cenko, M. Childress, P. Guhathakurta, L. Jiang, J.S. Kalirai, R.P. Kirshner, A. Stockton, E.J. Tollerud, J. Vinko, J.C. Wheeler, and J.-H. Woo. *ApJ,* **744**, #38, 2012.

156. The DEEP3 Galaxy Redshift Survey: The Impact of Environment on the Size Evolution of Massive Early-type Galaxies at Intermediate Redshift. M.C. Cooper, R.L. Griffith, J.A. Newman, A.L. Coil, M. Davis, A.A. Dutton, S.M. Faber, P. Guhathakurta, D.C. Koo, J.M. Lotz, B.J. Weiner, C.N.A. Willmer, and R. Yan. *MNRAS,* **419**, 3018–3027, 2012.

157. The DEEP2 Galaxy Redshift Survey: The Voronoi-Delaunay Method Catalog of Galaxy Groups. B.F. Gerke, J.A. Newman, M. Davis, A.L. Coil, M.C. Cooper, A.A. Dutton, S.M. Faber, P. Guhathakurta, N. Konidaris, D.C. Koo, L. Lin, K. Noeske, A.C. Phillips, D.J. Rosario, B.J. Weiner, C.N.A. Willmer, and R. Yan. *ApJ,* **751**, #50, 2012.

158. The SPLASH Survey: Spectroscopy of 15 M31 Dwarf Spheroidal Satellite Galaxies. E.J. Tollerud, R.L. Beaton, M.C. Geha, J.S. Bullock, P. Guhathakurta, J.S. Kalirai, S.R. Majewski, E.N. Kirby, K.M. Gilbert, B. Yniguez, R.J. Patterson, J.C. Ostheimer, J. Cooke, C.E. Dorman, A. Choudhury, and M.C. Cooper. *ApJ,* **752**, #45, 2012.

159. PHAT Stellar Cluster Survey. I. Year 1 Catalog and Integrated Photometry. L.C. Johnson, A.C. Seth, J.J. Dalcanton, N. Caldwell, M. Fouesneau, D.A. Gouliermis, P.W. Hodge, S.S. Larsen, K.A.G. Olsen, I. San Roman, A. Sarajedini, D.R. Weisz, B.F. Williams, L.C. Beerman, L. Bianchi, A.E. Dolphin, L. Girardi, P. Guhathakurta, J. Kalirai, D. Lang, A. Monachesi, S. Nanda, H.-W. Rix, and E.D. Skillman. *ApJ,* **752**, #95, 2012.

160. The SPLASH Survey: Kinematics of Andromeda's Inner Spheroid. C.E. Dorman, P. Guhathakurta, M.A. Fardal, D. Lang, M.C. Geha, K.M. Howley, J.S. Kalirai, J.-C. Cuillandre, J. Dalcanton, K.M. Gilbert, A.C. Seth, B.F. Williams, and B. Yniguez. *ApJ,* **752**, #147, 2012.

161. Discovery of Super-Li Rich Red Giants in Dwarf Spheroidal Galaxies. E. Kirby, X. Fu, P. Guhathakurta, and L. Deng. *ApJL,* **752**, #L16, 2012.

162. The Panchromatic Hubble Andromeda Treasury. J.J. Dalcanton, B.F. Williams, D. Lang, T.R. Lauer, J.S. Kalirai, A.C. Seth, A. Dolphin, P. Rosenfield, D.R. Weisz, E.F. Bell, L.C. Bianchi, M.L. Boyer, N.C. Caldwell, H. Dong, C.E. Dorman, K.M. Gilbert, L. Girardi, S.M. Gogarten, K.D. Gordon, P. Guhathakurta, P.W. Hodge, J.A. Holtzman, L.C. Johnson, S.S. Larsen, A. Lewis, J.L. Melbourne, K.A.G. Olsen, H.-W. Rix, K. Rosema, A. Saha, A. Sarajedini, E.D. Skillman, and K.Z. Stanek. *ApJS,* **200**, #18, 2012.

163. The M31 Velocity Vector. II. Radial Orbit Toward the Milky Way and Implied Local Group Mass. R.P. van der Marel, M. Fardal, G. Besla, R.L. Beaton, S.T. Sohn, J. Anderson, T. Brown, and P. Guhathakurta. *ApJ,* **753**, #8, 2012.

164. Evolution in the Dust Lane Fraction of Edge-on L_V^* Spiral Galaxies since $z = 0.8$. B.W. Holwerda, J.J. Dalcanton, D. Radburn-Smith, R.S. de Jong, P. Guhathakurta, A. Koekemoer, R.J. Allen, and T. Böker. *ApJ,* **753**, #25, 2012.

165. The Primeval Populations of the Ultra-Faint Dwarf Galaxies. T.M. Brown, J. Tumlinson, M. Geha, E.N. Kirby, D.A. VandenBerg, R. Muñoz, J.S. Kalirai, J.D. Simon, R.J. Avila, P. Guhathakurta, A. Renzini, and H.C. Ferguson. *ApJL,* **753**, #L21, 2012.

166. Spatially-resolved HST Grism Spectroscopy of a Lensed Emission Line Galaxy at $z \sim 1$. B.L. Frye, M. Hurley, D.V. Bowen, G. Meurer, K. Sharon, A. Straughn, D. Coe, T. Broadhurst, and P. Guhathakurta. *ApJ,* **754**, #17, 2012.

167. A Spectroscopic Survey of Andromeda's Western Shelf. M.A. Fardal, P. Guhathakurta, K.M. Gilbert, E.J. Tollerud, J.S. Kalirai, M. Tanaka, R. Beaton, M. Chiba, Y. Komiyama, and M. Iye. *MNRAS,* **423**, 3134–3147, 2012.

168. LAMOST Experiment for Galactic Understanding and Exploration (LEGUE): The Survey's Science Plan. L.-C. Deng, H.J. Newberg, C. Liu, J.L. Carlin, T.C. Beers, L. Chen, Y.-Q. Chen, N. Christlieb, C.J. Grillmair, P. Guhathakurta, Z.-W. Han, J.-L. Hou, H.-T. Lee, S. Lépine, J. Li, X.-W. Liu, K.-K. Pan, J.A. Sellwood, B. Wang, H.-C. Wang, F. Yang, B. Yanny, H.-T. Zhang, Y.-Y. Zhang, Z. Zheng, and Z. Zhu. *Research in Astron. Astrophys.,* **12**, 735–754, 2012.

169. An Algorithm for Preferential Selection of Spectroscopic Targets in LEGUE. J.L. Carlin, S. Lépine, H.J. Newberg, L.-C. Deng, T.C. Beers, Y.-Q. Chen, N. Christlieb, X.-T. Fu, S. Gao, C.J. Grillmair, P. Guhathakurta, Z.-W. Han, J.-L. Hou, H.-T. Lee, J. Li, C. Liu, X.-W. Liu, K.-K. Pan, J.A. Sellwood, H.-C. Wang, F. Yang, B. Yanny, Y.-Y. Zhang, Z. Zheng, and Z. Zhu. *Research in Astron. Astrophys.,* **12**, 755–771, 2012.

170. The Panchromatic Hubble Andromeda Treasury. I: Bright UV Stars in the Bulge of M31. P. Rosenfield, L.C. Johnson, L. Girardi, J.J. Dalcanton, A. Bressan, D. Lang, B.F. Williams, P. Guhathakurta, K.M. Howley, T.R. Lauer, E.F. Bell, L. Bianchi, N. Caldwell, A. Dolphin, C.E. Dorman, K.M. Gilbert, J. Kalirai, S.S. Larsen, K.A.G. Olsen, H.-W. Rix, A.C. Seth, E.D. Skillman, and D.R. Weisz. *ApJ,* **755**, #131, 2012.

171. A Unique Isolated Dwarf Spheroidal Galaxy at $D = 1.9$ Mpc. D. Makarov, L. Makarova, M. Sharina, R. Uklein, A. Tikhonov, P. Guhathakurta, E. Kirby, and N. Terekhova. *MNRAS,* **425**, 709–719, 2012.

172. The Epoch of Disk Settling: $z \sim 1$ to Now. S.A. Kassin, B.J. Weiner, S.M. Faber, J.P. Gardner, C.N.A. Willmer, A.L. Coil, M.C. Cooper, J. Devriendt, A.A. Dutton, P. Guhathakurta, D.C. Koo, A.J. Metevier, K.G. Noeske, and J.R. Primack. *ApJ,* **758**, #106, 2012.

173. Stellar Kinematics of the Andromeda II Dwarf Spheroidal Galaxy. N. Ho, M. Geha, R.M. Muñoz, P. Guhathakurta, J. Kalirai, K.M. Gilbert, E. Tollerud, J. Bullock, R.L. Beaton, and S.R. Majewski. *ApJ,* **758**, #124, 2012.

174. The Panchromatic Hubble Andromeda Treasury II. Tracing the Inner M31 Halo with Blue Horizontal Branch Stars. B.F. Williams, J.J. Dalcanton, E.F. Bell, K.M. Gilbert, P. Guhathakurta, T.R. Lauer, A.C. Seth, J.S. Kalirai, P. Rosenfield, and L. Girardi. *ApJ,* **759**, #46, 2012.

175. Global Properties of M31's Stellar Halo from the SPLASH Survey: I. Surface Brightness Profile. K.M. Gilbert, P. Guhathakurta, R.L. Beaton, J. Bullock, M.C. Geha, J.S. Kalirai, E.N. Kirby, S.R. Majewski, J.C. Ostheimer, R.J. Patterson, E.J. Tollerud, M. Tanaka, and M. Chiba. *ApJ,* **760**, #76, 2012.

176. Internal Stellar Kinematics of M32 from the SPLASH Survey: Dark Halo Constraints and the Formation of Compact Elliptical Galaxies. K.M. Howley, P. Guhathakurta, R. van der Marel, M. Geha, J. Kalirai, B. Yniguez, E. Kirby, J.-C. Cuillandre, and K. Gilbert. *ApJ,* **765**, #65, 2013.

177. The Velocity Anisotropy of Distant Milky Way Halo Stars from Hubble Space Telescope Proper Motions. A.J. Deason, R.P. van der Marel, P. Guhathakurta, S.T. Sohn, and T.M. Brown. *ApJ,* **766**, #24, 2013.

178. Measuring Detailed Chemical Abundances from Coadded Medium Resolution Spectra: I. Tests Using Milky Way Dwarf Spheroidal Galaxies and Globular Clusters. L. Yang, E.N. Kirby, P. Guhathakurta, E.W. Peng, and L. Cheng. *ApJ,* **768**, #4, 2013.

179. SEDS: The Spitzer Extended Deep Survey. Survey Design, Photometry, and Deep IRAC Source Counts. M.L.N. Ashby, S.P. Willner, G.G. Fazio, J.-S. Huang, R. Arendt, P. Barmby, G. Barro, E.F. Bell, R. Bouwens, A. Cattaneo, D. Croton, R. Davé, J.S. Dunlop, E. Egami, S. Faber, K. Finlator, N.A. Grogin, P. Guhathakurta, L. Hernquist, J.L. Hora, G. Illingworth, A. Kashlinsky, A.M. Koekemoer, D.C. Koo, I. Labbé, Y. Li, L. Lin, H. Moseley, K. Nandra, J. Newman, K. Noeske, M. Ouchi, M. Peth, D. Rigopoulou, B. Robertson, V. Sarajedini, L. Simard, H.A. Smith, Z. Wang, R. Wechsler, B. Weiner, G. Wilson, S. Wuyts, T. Yamada, and H. Yan. *ApJ,* **769**, #80, 2013.

180. The Stellar Initial Mass Function of Ultra-Faint Dwarf Galaxies: Evidence for IMF Variations with Galactic Environment. M. Geha, T.M. Brown, J. Tumlinson, J.S. Kalirai, J.D. Simon, E.N. Kirby, D.A. VandenBerg, R.R. Muñoz, R.J. Avila, P. Guhathakurta, and H.C. Ferguson. *ApJ*, **771**, #29, 2013.

181. Is There a Metallicity Ceiling to Form Carbon Stars? – A Novel Technique Reveals a Scarcity of C Stars in the Inner M31 Disk. M.L. Boyer, L. Girardi, P. Marigo, B.F. Williams, B. Aringer, W. Nowotny, P. Rosenfield, C.E. Dorman, P. Guhathakurta, J.J. Dalcanton, J.L. Melbourne, K.A.G. Olsen, and D.R. Weisz. *ApJ*, **774**, #83, 2013.

182. The DEEP2 Redshift Survey: Design, Observations, Data Reductions, and Redshifts. J.A. Newman, M.C. Cooper, M. Davis, S.M. Faber, A.L. Coil, P. Guhathakurta, D.C. Koo, A.C. Phillips, C. Conroy, A.A. Dutton, D.P. Finkbeiner, B.F. Gerke, D.J. Rosario, B.J. Weiner, C.N.A. Willmer, R. Yan, J.J. Harker, S.A. Kassin, N.P. Konidaris, K. Lai, D.S. Madgwick, K.G. Noeske, G.D. Wirth, A.J. Connolly, N. Kaiser, E.N. Kirby, B.C. Lemaux, L. Lin, J.M. Lotz, G.A. Luppino, C. Marinoni, D.J. Matthews, A. Metevier, and R.P. Schiavon. *ApJS*, **208**, #5, 2013.

183. Inferring the Andromeda Galaxy's Mass from its Giant Southern Stream with Bayesian Simulation Sampling. M.A. Fardal, M.D. Weinberg, A. Babul, M.J. Irwin, P. Guhathakurta, K.M. Gilbert, A.M.N. Ferguson, R.A. Ibata, G.F. Lewis, N.R. Tanvir, and A.P. Huxor. *MNRAS*, **434**, 2779–2802, 2013.

184. HST/WFC3 Observations of Low-mass Globular Clusters AM 4 and Palomar 13: Physical Properties and Implications for Mass Loss. K.M. Hamren, G.H. Smith, P. Guhathakurta, A.E. Dolphin, D.R. Weisz, A. Rajan, and C.J. Grillmair. *AJ*, **146**, #116, 2013.

185. The Universal Stellar Mass-Stellar Metallicity Relation for Dwarf Galaxies. E.N. Kirby, J.G. Cohen, P. Guhathakurta, L. Cheng, J.S. Bullock, and A. Gallazzi. *ApJ*, **779**, #102, 2013.

186. A New Approach to Detailed Structural Decomposition from the SPLASH and PHAT Surveys: Kicked-up Disk Stars in the Andromeda Galaxy? C.E. Dorman, L.M. Widrow, P. Guhathakurta, A.C. Seth, D. Foreman-Mackey, E.F. Bell, J.J. Dalcanton, K.M. Gilbert, E.D. Skillman, and B.F. Williams. *ApJ*, **779**, #103, 2013.

187. Stellar Kinematics and Structural Properties of Virgo Cluster Dwarf Early-Type Galaxies from the SMAKCED Project. I. Kinematically Decoupled Cores and Implications for Infallen Groups in Clusters. E. Toloba, P. Guhathakurta, G. van de Ven, S. Boissier, A. Boselli, M. den Brok, J. Falcón-Barroso, G. Hensler, J. Janz, E. Laurikainen, T. Lisker, S. Paudel, R.F. Peletier, A. Ryś, and H. Salo. *ApJ*, **783**, #120, 2014.

188. The First Hypervelocity Star from the LAMOST Survey. Z. Zheng, J.L. Carlin, T.C. Beers, L. Deng, C.J. Grillmair, P. Guhathakurta, S. Lépine, H.J. Newberg, B. Yanny, H. Zhang, C. Liu, J. Ge, and Y. Zhang. *ApJL*, **785**, #L23, 2014.

189. The Panchromatic Hubble Andromeda Treasury V: Ages and Masses of the Year 1 Stellar Clusters. M. Fouesneau, L.C. Johnson, D.R. Weisz, J.J. Dalcanton, E.F. Bell, L. Bianchi, N. Caldwell, D.A. Gouliermis, P. Guhathakurta, J. Kalirai, S.S. Larsen, H.-W. Rix, A.C. Seth, E.D. Skillman, B.F. Williams, and PHAT collaboration. *ApJ*, **786**, #117, 2014.

190. Discovery of a New Faint Dwarf Galaxy Associated with NGC 253. D.J. Sand, D. Crnojević, J. Strader, E. Toloba, J.D. Simon, N. Caldwell, P. Guhathakurta, B. McLeod, and A.C. Seth. *ApJL*, **793**, #L7, 2014.

191. Discovery of a Close Pair of Faint Dwarf Galaxies in the Halo of Centaurus A. D. Crnojević, D.J. Sand, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. *ApJL*, **795**, #L35, 2014.

192. TriAnd and its Siblings: Satellites of Satellites in the Milky Way Halo. A.J. Deason, V. Belokurov, K.M. Hamren, S.E. Koposov, K.M. Gilbert, R.L. Beaton, C.E. Dorman, P. Guhathakurta, S.R. Majewski, and E.C. Cunningham. *MNRAS*, **444**, 3975–3985, 2014.

193. Global Properties of M31's Stellar Halo from the SPLASH Survey: II. Metallicity Profile. K.M. Gilbert, J.S. Kalirai, P. Guhathakurta, R.L. Beaton, M.C. Geha, E.N. Kirby, S.R. Majewski, R.J. Patterson, E.J. Tollerud, J.S. Bullock, M. Tanaka, and M. Chiba. *ApJ*, **796**, #76, 2014.

194. The Quenching of the Ultra-Faint Dwarf Galaxies in the Reionization Era. T.M. Brown, J. Tumlinson, M. Geha, J.D. Simon, L.C. Vargas, D.A. VandenBerg, E.N. Kirby, J.S. Kalirai, R.J. Avila, M. Gennaro, H.C. Ferguson, R.R. Muñoz, P. Guhathakurta, and A. Renzini. *ApJ*, **796**, #91, 2014.

195. The Next Generation Virgo Cluster Survey. XV. The Photometric Redshift Estimation for Background Sources. A. Raichoor, S. Mei, T. Erben, H. Hildebrandt, M. Huertas-Company, O. Ilbert, R. Licitra, N.M. Ball, S. Boissier, A. Boselli, Y.-T. Chen, P. Côté, J.-C. Cuillandre, P.-A. Duc, P.R. Durrell, L. Ferrarese, P. Guhathakurta, S.D.J. Gwyn, J.J. Kavelaars, A. Lançon, C. Liu, L.A. MacArthur, M. Muller, R.P. Muñoz, E.W. Peng, T.H. Puzia, M. Sawicki, E. Toloba, L. Van Waerbeke, D. Woods, and H. Zhang. *ApJ*, **797**, #102, 2014.

196. [α/Fe] Abundances of Four Outer M31 Halo Stars. L.C. Vargas, K.M. Gilbert, M. Geha, E.J. Tollerud, E.N. Kirby, and P. Guhathakurta. *ApJL*, **797**, #L2, 2014.

197. Stellar Kinematics and Structural Properties of Virgo Cluster Dwarf Early-Type Galaxies from the SMAKCED Project. II. The Survey and a Systematic Analysis of Kinematic Anomalies and Asymmetries. E. Toloba, P. Guhathakurta, R.F. Peletier, A. Boselli, T. Lisker, J. Falcón-Barroso, J.D. Simon, G. van de Ven, S. Paudel, E. Emsellem, J. Janz, M. den Brok, J. Gorgas, G. Hensler, E. Laurikainen, S.-M. Niemi, A. Ryś, and H. Salo. *ApJS*, **215**, #17, 2014.

198. Metallicity Evolution of the Six Most Luminous M31 Dwarf Satellites. N. Ho, M. Geha, E.J. Tollerud, R. Zinn, P. Guhathakurta, and L.C. Vargas. *ApJ*, **798**, #77, 2015.

199. Trends in Dwarf Early-type Kinematics with Cluster-centric Radius Driven by Tidal Stirring. A.J. Benson, E. Toloba, L. Mayer, J.D. Simon, and P. Guhathakurta. *ApJ*, **799**, #171, 2015.

200. Stellar Kinematics and Structural Properties of Virgo Cluster Dwarf Early-type Galaxies from the SMAKCED Project. III. Angular Momentum and Constraints on Formation Scenarios. E. Toloba, P. Guhathakurta, A. Boselli, R.F. Peletier, E. Emsellem, T. Lisker, G. van de Ven, J.D. Simon, J. Falcón-Barroso, J.J. Adams, A.J. Benson, S. Boissier, M. den Brok, J. Gorgas, G. Hensler, J. Janz, E. Laurikainen, S. Paudel, A. Ryś, and H. Salo. *ApJ*, **799**, #172, 2015.

201. Carbon in Red Giants in Globular Clusters and Dwarf Spheroidal Galaxies. E.N. Kirby, M. Guo, A.J. Zhang, M. Deng, J.G. Cohen, P. Guhathakurta, M.D. Shetrone, Y.S. Lee, and L. Rizzi. *ApJ*, **801**, #125, 2015.

202. Tracing the Metal-poor M31 Stellar Halo with Blue Horizontal Branch Stars. B.F. Williams, J.J. Dalcanton, E.F. Bell, K.M. Gilbert, P. Guhathakurta, C. Dorman, T.R. Lauer, A.C. Seth, J.S. Kalirai, P. Rosenfield, and L. Girardi. *ApJ*, **802**, #49, 2015.

203. A Clear Age-Velocity Dispersion Correlation in Andromeda's Stellar Disk. C.E. Dorman, P. Guhathakurta, A.C. Seth, D.R. Weisz, E.F. Bell, J.J. Dalcanton, K.M. Gilbert, K.M. Hamren, A.R. Lewis, E.D. Skillman, and E. Toloba. *ApJ*, **803**, #24, 2015.

204. The Panchromatic Hubble Andromeda Treasury XI. The Spatially-Resolved Recent Star Formation History of M31. A.R. Lewis, A.E. Dolphin, J.J. Dalcanton, D.R. Weisz, B.F. Williams, E.F. Bell, A.C. Seth, J.E. Simones, E.D. Skillman, Y. Choi, M. Fouesneau, P. Guhathakurta, L.C. Johnson, J.S. Kalirai, A.K. Leroy, A. Monachesi, H.-W. Rix, and A. Schruba. *ApJ*, **805**, #183, 2015.

205. A Comprehensive Archival Search for Counterparts to Ultra-Compact High-Velocity Clouds: Five Local Volume Dwarf Galaxies. D.J. Sand, D. Crnojević, P. Bennet, B. Willman, J. Hargis, J. Strader, E. Olszewski, E.J. Tollerud, J.D. Simon, N. Caldwell, P. Guhathakurta, B.L. James, S. Koposov, B. McLeod, N. Morell, M. Peacock, R. Salinas, A.C. Seth, D.P. Stark, and E. Toloba. *ApJ*, **806**, #95, 2015.

206. The High-mass Stellar Initial Mass Function in M31 Clusters. D.R. Weisz, L.C. Johnson, D. Foreman-Mackey, A.E. Dolphin, L.C. Beerman, B.F. Williams, J.J. Dalcanton, H.-W. Rix, D.W. Hogg, M. Fouesneau, B.D. Johnson, E.F. Bell, M.L. Boyer, D. Gouliermis, P. Guhathakurta, J.S. Kalirai, A.R. Lewis, A.C. Seth, and E.D. Skillman. *ApJ*, **806**, #198, 2015.

207. Fixing the Reference Frame for PPMXL Proper Motions Using Extragalactic Sources. K. Grabowski, J.L. Carlin, H.J. Newberg, T.C. Beers, L. Chen, L.-C. Deng, C.J. Grillmair, P. Guhathakurta, J.-L. Hou, Y.-H. Hou, S. Lépine, C. Liu, X.-W. Liu, A.-L. Luo, M.C. Smith, B. Yanny, H.-T. Zhang, Y. Zhang, and Z. Zheng. *Research in Astron. Astrophys.,* **15**, #849, 2015.

208. The GALEX Ultraviolet Virgo Cluster Survey (GUViCS). V. Ultraviolet Diffuse Emission and Cirrus Properties in the Virgo Cluster Direction. S. Boissier, A. Boselli, E. Voyer, S. Bianchi, C. Pappalardo, P. Guhathakurta, S. Heinis, L. Cortese, P.A. Duc, J.-C. Cuillandre, J.I. Davies, and M.W.L. Smith. *A&A*, **579**, #29, 2015.

209. Estimation of Distances to Stars with Stellar Parameters from LAMOST. J.L. Carlin, C. Liu, H.J. Newberg, T.C. Beers, L. Chen, L. Deng, P. Guhathakurta, J. Hou, Y. Hou, S. Lépine, G. Li, A.-L. Luo, M.C. Smith, Y. Wu, M. Yang, B. Yanny, H. Zhang, and Z. Zheng. *AJ,* **150**, #4, 2015.

210. A Spectroscopic and Photometric Exploration of the C/M Ratio in the Disk of M31. K.M. Hamren, C.M. Rockosi, P. Guhathakurta, M.L. Boyer, G.H. Smith, J.J. Dalcanton, D. Gregersen, A.C. Seth, A.R. Lewis, B.F. Williams, E. Toloba, L. Girardi, C.E. Dorman, K.M. Gilbert, and D.R. Weisz. *ApJ*, **810**, #60, 2015.

211. *AEGIS-X*: Deep Chandra Imaging of the Central Groth Strip. K. Nandra, E.S. Laird, J.A. Aird, M. Salvato, A. Georgakakis, G. Barro, P.G. Perez-Gonzalez, P. Barmby, R.-R. Chary, A. Coil, M.C. Cooper, M. Davis, M. Dickinson, S.M. Faber, G.G. Fazio, P. Guhathakurta, S. Gwyn, L.-T., Hsu, J.-S. Huang, R.J. Ivison, D.C. Koo, J.A. Newman, C. Rangel, T. Yamada, and C. Willmer. *ApJS*, **220**, #10, 2015.

212. HST/ACS Direct Ages of the Dwarf Elliptical Galaxies NGC 147 and NGC 185. M. Geha, D. Weisz, A. Grocholski, A. Dolphin, R.P. van der Marel, and P. Guhathakurta. *ApJ*, **811**, #114, 2015.

213. The Next Generation Virgo Cluster Survey. X. Properties of Ultra-Compact Dwarfs in the M87, M49, and M60 Regions. C. Liu, E.W. Peng, P. Côté, L. Ferrarese, A. Jordán, J.C. Mihos, H.-X. Zhang, R.P. Muñoz, T.H. Puzia, A. Lançon, S. Gwyn, J.-C. Culliandre, J.P. Blakeslee, A. Boselli, P.R. Durrell, P.-A. Duc, P. Guhathakurta, L.A. MacArthur, S. Mei, R. Sánchez-Janssen, and H. Xu. *ApJ*, **812**, #34, 2015.

214. The Most Massive Ultra-Compact Dwarf Galaxy in the Virgo Cluster. C. Liu, E.W. Peng, E. Toloba, J.C. Mihos, L. Ferrarese, K. Alamo-Martínez, H.-X. Zhang, P. Côté, J.-C. Cuillandre, E.C. Cunningham, P. Guhathakurta, S. Gwyn, G. Herczeg, S. Lim, T.H. Puzia, J. Roediger, R. Sánchez-Janssen, and J. Yin. *ApJL*, **812**, #L2, 2015.

215. The Panchromatic Hubble Andromeda Treasury. VIII. A Wide-area, High-resolution Map of Dust Extinction in M31. J.J. Dalcanton, M. Fouesneau, D.W. Hogg, D. Lang, A.K. Leroy, K.D. Gordon, K. Sandstrom, D.R. Weisz, B.F. Williams, E.F. Bell, H. Dong, K.M. Gilbert, D.A. Gouliermis, P. Guhathakurta, T.R. Lauer, A. Schruba, A.C. Seth, and E.D. Skillman. *ApJ*, **814**, #3, 2015.

216. Triangulum II: Possibly a Very Dense Ultra-faint Dwarf Galaxy. E.N. Kirby, J.G. Cohen, J.D. Simon, and P. Guhathakurta. *ApJL*, **814**, #L7, 2015.

217. Panchromatic Hubble Andromeda Treasury XII. Mapping Stellar Metallicity Distributions in M31. D. Gregersen, A.C. Seth, B.F. Williams, D. Lang, J.J. Dalcanton, L. Girardi, E.D. Skillman, E. Bell, A.E. Dolphin, M. Fouesneau, P. Guhathakurta, K.M. Hamren, L.C. Johnson, J. Kalirai, A.R. Lewis, A. Monachesi, and K. Olsen. *AJ*, **150**, #189, 2015.

218. A Tidally Disrupting Dwarf Galaxy in the Halo of NGC 253. E. Toloba, D.J. Sand, K. Spekkens, D. Crnojević, J.D. Simon, P. Guhathakurta, J. Strader, N. Caldwell, B. McLeod, and A.C. Seth. *ApJL*, **816**, #L5, 2016.

219. The Next Generation Virgo Cluster Survey. XIX. Tomography of Milky Way Substructures in the NGVS Footprint. D. Lokhorst, E. Starkenburg, A.W. McConnachie, J.F. Navarro, L. Ferrarese, P. Côté, C. Liu, E.W. Peng, S.D.J. Gwyn, J.-C. Culliandre, and P. Guhathakurta. *ApJ*, **819**, #124, 2016.

220. Lithium-rich Giants in Globular Clusters. E.N. Kirby, P. Guhathakurta, A.J. Zhang, J. Hong, M. Guo, R. Guo, J.G. Cohen, and K. Cunha. *ApJ*, **819**, #135, 2016.

221. Isotropic at the Break? 3D Kinematics of Milky Way Halo Stars in the Foreground of M31. E.C. Cunningham, A.J. Deason, P. Guhathakurta, C.M. Rockosi, R.P. van der Marel, E. Toloba, K.M. Gilbert, S.T. Sohn, and C.E. Dorman. *ApJ*, **820**, #18, 2016.

222. Discovery of an Ultra-Diffuse Galaxy in the Pisces-Perseus Supercluster. D. Martínez-Delgado, R. Läsker, M. Sharina, E. Toloba, J. Fliri, R. Beaton, D. Valls-Gabaud, I.D. Karachentsev, T.S. Chonis, E.K. Grebel, D.A. Forbes, A.J. Romanowsky, J. Gallego-Laborda, K. Teuwen, M.A. Gómez-Flechoso, J. Wang, P. Guhathakurta, S. Kaisin, and N. Ho. *AJ*, **151**, #96, 2016.

223. Characterizing the SHARDS of Disrupted Milky Way Satellites with LAMOST. J.L. Carlin, C. Liu, H.J. Newberg, T.C. Beers, L. Deng, P. Guhathakurta, Z. Cao, Y. Hou, Y. Wang, Y. Wu, and Y. Zhang. *ApJ*, **822**, #16, 2016.

224. The Next Generation Virgo Cluster Survey XVI. The Angular Momentum of Dwarf Early-type Galaxies from Globular Cluster Satellites. E. Toloba, B. Li, P. Guhathakurta, E.W. Peng, L. Ferrarese, P. Côté, E. Emsellem, S. Gwyn, H. Zhang, A. Boselli, J.-C. Cuillandre, A. Jordán, and C. Liu. *ApJ*, **822**, #51, 2016.

225. Stellar Mass–Gas-phase Metallicity Relation at $0.5 \leq z \leq 0.7$: A Power Law with Increasing Scatter toward the Low-mass Regime. Y. Guo, D.C. Koo, Y. Lu, J.C. Forbes, M. Rafelski, J.R. Trump, R. Amorín, G. Barro, R. Davé, S.M. Faber, N.P. Hathi, H. Yesuf, M.C. Cooper, A. Dekel, P. Guhathakurta, E.N. Kirby, A.M. Koekemoer, P.G. Pérez-González, L. Lin, J.A. Newman, J.R. Primack, D.J. Rosario, C.N.A. Willmer, and R. Yan. *ApJ*, **822**, #103, 2016.

226. The Extended Halo of Centaurus A: Uncovering Satellites, Streams, and Substructures. D. Crnojević, D.J. Sand, K. Spekkens, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. *ApJ*, **823**, #19, 2016.

227. The Next Generation Virgo Cluster Survey (NGVS). XIII. The Luminosity and Mass Function of Galaxies in the Core of the Virgo Cluster and the Contribution from Disrupted Satellites. L. Ferrarese, P. Côté, R. Sánchez-Janssen, J. Roediger, A.W. McConnachie, P.R. Durrell, L.A. MacArthur, J.P. Blakeslee, P.-A. Duc, S. Boissier, A. Boselli, S. Courteau, J.-C. Culliandre, E. Emsellem, S.D.J. Gwyn, P. Guhathakurta, A. Jordán, A. Lançon, C. Liu, S. Mei, J.C. Mihos, J.F. Navarro, E.W. Peng, T.H. Puzia, J.E. Taylor, E. Toloba, and H. Zhang. *ApJ*, **824**, #10, 2016.

228. New Spectroscopic Technique Based on Coaddition of Surface Brightness Fluctuations: NGC 4449 and its Stellar Tidal Stream. E. Toloba, P. Guhathakurta, A.J. Romanowsky, J.P. Brodie, D. Martínez-Delgado, J.A. Arnold, N. Ramachandran, and K. Theakanath. *ApJ*, **824**, #35, 2016.

229. Carbon Stars in the Satellites and Halo of M31. K. Hamren, R.L. Beaton, P. Guhathakurta, K.M. Gilbert, E.J. Tollerud, M.L. Boyer, C.M. Rockosi, G.H. Smith, S.R. Majewski, and K. Howley. *ApJ*, **828**, #15, 2016.

230. New Constraints on a Complex Relation Between Globular Cluster Colors and Environment. M. Powalka, T.H. Puzia, A. Lançon, E.W. Peng, F. Schönebeck, K. Alamo-Martínez, S. Ángel, J.P. Blakeslee, P. Côté, J.-C. Cuillandre, P.-A. Duc, P. Durrell, L. Ferrarese, E.K. Grebel, P. Guhathakurta, S.D.J. Gwyn, H. Kuntschner, S. Lim, C. Liu, M. Lyubenova, J.C. Mihos, R.P. Muñoz, Y. Ordenes-Briceño, J. Roediger, R. Sánchez-Janssen, C. Spengler, E. Toloba, and H. Zhang. *ApJL*, **829**, #L5, 2016.

231. Spectroscopic Confirmation of the Dwarf Spheroidal Galaxy d0944+71 as a Member of the M81 Group of Galaxies. E. Toloba, D. Sand, P. Guhathakurta, K. Chiboucas, D. Crnojević, and J.D. Simon. *ApJ*, **829**, #L21, 2016.

232. The Next Generation Virgo Cluster Survey (NGVS). XXV. Fiducial Panchromatic Colors of Virgo Core Globular Clusters and Their Comparison to Model Predictions. M. Powalka, A. Lançon, T.H. Puzia, E.W. Peng, C. Liu, R.P. Muñoz, J.P. Blakeslee, P. Côté, L. Ferrarese, J. Roediger, R. Sánchez-Janssen, H. Zhang, P.R. Durrell, J.-C. Culliandre, P.-A. Duc, P. Guhathakurta, S.D.J. Gwyn, P. Hudelot, S. Mei, and E. Toloba. *ApJS*, **227**, #12, 2016.

233. Runaway Dwarf Carbon as Candidate Supernova Ejecta. K.A. Plant, B. Margon, P. Guhathakurta, E.C. Cunningham, E. Toloba, and J.A. Munn. *ApJ*, **833**, #232, 2016.

234. The Next Generation Virgo Cluster Survey. XXII. Shell Feature Early-type Dwarf Galaxies in the Virgo Cluster. S. Paudel, R. Smith, P.-A. Duc, P. Côté, J.-C. Cuillandre, L. Ferrarese, J.P. Blakeslee, A. Boselli, M. Cantiello, S.D.J. Gwyn, P. Guhathakurta, S. Mei, J.C. Mihos, E.W. Peng, M. Powalka, R. Sánchez-Janssen, E. Toloba, and H. Zhang. *ApJ*, **834**, #66, 2017.

235. The Next Generation Virgo Cluster Survey (NGVS). XXIV. The Red Sequence to ~10^6 $L_\odot$ and Comparisons with Galaxy Formation Models. J.C. Roediger, L. Ferrarese, P. Côté, L.A. MacArthur, R. Sánchez-Janssen, J.P. Blakeslee, E.W. Peng, C. Liu, R. Muñoz, J.-C. Cuillandre, S. Gwyn, S. Mei, S. Boissier, A. Boselli, M. Cantiello, S. Courteau, P.-A. Duc, A. Lançon, J.C. Mihos, T.H. Puzia, J.E. Taylor, P.R. Durrell, E. Toloba, P. Guhathakurta, and H. Zhang. *ApJ*, **836**, #120, 2017.

236. Emission-line Stars in M31 from the SPLASH and PHAT Surveys. L.J. Prichard, P. Guhathakurta, K.M. Hamren, J.J. Dalcanton, C.E. Dorman, A.C. Seth, B.F. Williams, G. Damon, A. Ilango, and M. Ilango. *MNRAS*, **465**, 4180–4203, 2017.

237. Triangulum II: Not Especially Dense After All. E.N. Kirby, J.G. Cohen, J.D. Simon, P. Guhathakurta, A.O. Thygesen, and G.E. Duggan. *ApJ*, **838**, #83, 2017.

238. No Evidence for Feedback: Unexceptional Low-ionization Winds in Host Galaxies of Low Luminosity Active Galactic Nuclei at Redshift z ~ 1. H.M. Yesuf, D.C. Koo, S.M. Faber, J.X. Prochaska, Y. Guo, F.S. Liu, E.C. Cunningham, A.L. Coil, and P. Guhathakurta. *ApJ*, **841**, #83, 2017.

239. Hubble Space Telescope Imaging of the Ultra-compact High Velocity Cloud AGC 226067: A Stripped Remnant in the Virgo Cluster. D.J. Sand, A.C. Seth, D. Crnojević, K. Spekkens, J. Strader, E.A.K. Adams, N. Caldwell, P. Guhathakurta, J. Kenney, S. Randall, J.D. Simon, E. Toloba, and B. Willman. *ApJ*, **843**, #134, 2017.

240. The Next Generation Virgo Cluster Survey (NGVS). XXVI. The Issues of Photometric Age and Metallicity Estimates for Globular Clusters. M. Powalka, A. Lançon, T.H. Puzia, E.W. Peng, C. Liu, R.P. Muñoz, J.P. Blakeslee, P. Côté, L. Ferrarese, J. Roediger, R. Sánchez-Janssen, H. Zhang, P.R. Durrell, J.-C. Cuillandre, P.-A. Duc, P. Guhathakurta, S.D.J. Gwyn, P. Hudelot, S. Mei, and E. Toloba. *ApJ*, **844**, #104, 2017.

241. Discovery of a Group of Receding, Variable Halo Stars Towards Norma. S. Chakrabarti, R. Angeloni, K. Freeman, B. Sargent, J.D. Simon, P. Konorski, W. Gieren, B. Sesar, A. Lipnicky, L. Blitz, G. Basri, W. Vacca, M. Marengo, P. Guhathakurta, A. Quillen, and P. Chang. *ApJ*, **844**, #159, 2017.

242. Project AMIGA: A Minimal Covering Factor for Optically Thick Circumgalactic Gas Around the Andromeda Galaxy. J.C. Howk, C.B. Wotta, M.A. Berg, N. Lehner, F.J. Lockman, Z. Hafen, D.J. Pisano, C.-A. Faucher-Giguère, B.P. Wakker, J.X. Prochaska, S.A. Wolfe, J. Ribaudo, K.A. Barger, L. Corlies, A.J. Fox, P. Guhathakurta, E.B. Jenkins, J. Kalirai, J.M. O'Meara, M.S. Peeples, K.R. Stewart, and J. Strader. *ApJ*, **846**, #141, 2017.

243. Virgo Redux: The Masses and Stellar Content of Nuclei in Early-type Galaxies from Multiband Photometry and Spectroscopy. C. Spengler, P. Côté, J. Roediger, L. Ferrarese, R. Sánchez-Janssen, E. Toloba, Y. Liu, P. Guhathakurta, J.-C. Culliandre, S. Gwyn, A. Zirm, R. Muñoz, T. Puzia, A. Lançon, E.W. Peng, S. Mei, and M. Powalka. *ApJ*, **849**, #55, 2017.

244. Global Properties of M31's Stellar Halo from the SPLASH Survey: III. Measuring the Stellar Velocity Dispersion Profile. K.M. Gilbert, E. Tollerud, R.L. Beaton, P. Guhathakurta, J.S. Bullock, M. Chiba, J.S. Kalirai, E.N. Kirby, S.R. Majewski, and M. Tanaka. *ApJ*, **852**, #128, 2018.

245. Stellar Stream and Halo Structure in the Andromeda Galaxy from a Subaru/Hyper Suprime-Cam Survey. Y. Komiyama, M. Chiba, M. Tanaka, M. Tanaka, T. Kirihara, Y. Miki, M. Mori, R.H. Lupton, P. Guhathakurta, J.S. Kalirai, K. Gilbert, E. Kirby, M.G. Lee, I.S. Jang, S. Sharma, and K. Hayashi. *ApJ*, **853**, #29, 2018.

246. Evidence of a Non-Universal Stellar Initial Mass Function. Insights from HST Optical Imaging of 6 Ultra Faint Dwarf Milky Way Satellites. M. Gennaro, K. Tchernyshyov, T.M. Brown, M. Geha, R.J. Avila, P. Guhathakurta, J.S. Kalirai, E.N. Kirby, A. Renzini, J.D. Simon, J. Tumlinson, and L.C. Vargas. *ApJ*, **855**, #20, 2018.

247. The Next Generation Virgo Cluster Survey (NGVS). XXXII. A Search for Globular Cluster Substructures in the Virgo Galaxy Cluster Core. M. Powalka, T.H. Puzia, A. Lançon, A. Longobardi, E.W. Peng, P.-A. Duc, K. Alamo-Martínez, J.P. Blakeslee, P. Côté, J.-C. Culliandre, P. Durrell, P. Eigenthaler, L. Ferrarese, P. Guhathakurta, S.D.J. Gwyn, P. Hudelot, C. Liu, S. Mei, R.P. Muñoz, J. Roediger, R. Sánchez-Janssen, E. Toloba, and H. Zhang. *ApJ*, **856**, #84, 2018.

248. Dark Matter in Ultra-diffuse Galaxies in the Virgo Cluster from Their Globular Cluster Populations. E. Toloba, S. Lim, E. Peng, L.V. Sales, P. Guhathakurta, J.C. Mihos, P. Côté, A. Boselli, J.-C. Culliandre, L. Ferrarese, S. Gwyn, A. Lançon, R. Muñoz, and T. Puzia. *ApJL*, **856**, #L31, 2018.

249. The Globular Cluster Systems of Ultra-Diffuse Galaxies in the Coma Cluster. S. Lim, E.W. Peng, P. Côté, L.V. Sales, M. den Brok, J.P. Blakeslee, and P. Guhathakurta. *ApJ*, **862**, #82, 2018.

250. The Next Generation Virgo Cluster Survey (NGVS). XXXI. The Kinematics of Intra-Cluster Globular Clusters in the Core of the Virgo Cluster. A. Longobardi, E.W. Peng, P. Côté, J.C. Mihos, L. Ferrarese, T.H. Puzia, A. Lançon, H.-X. Zhang, R.P. Muñoz, J.P. Blakeslee, P. Guhathakurta, P.R. Durrell, R. Sánchez-Janssen, E. Toloba, A. Jordán, S. Eyheramendy, J.-C. Culliandre, S.D.J. Gwyn, A. Boselli, P.-A. Duc, C. Liu, K. Alamo-Martínez, M. Powalka, and S. Lim. *ApJ*, **864**, #36, 2018.

251. Project AMIGA: Distance and Metallicity Gradients Along Andromeda's Giant Southern Stream from the Red Clump. R.E. Cohen, J.S. Kalirai, K.M. Gilbert, P. Guhathakurta, M.S. Peeples, N. Lehner, T.M. Brown, L. Bianchi, K.A. Barger, and J.M. O'Meara. *AJ*, **156**, #230, 2018.

252. Nebular Spectroscopy of Kepler's Brightest Supernova. G. Dimitriadis, C. Rojas-Bravo, C.D. Kilpatrick, R.J. Foley, A.L. Piro, J.S. Brown, P. Guhathakurta, A.C.N. Quirk, A. Rest, G.M. Strampelli, B.E. Tucker, and A. Villar. *ApJL*, **870**, #L14, 2019.

253. Asymmetric Drift in the Andromeda Galaxy (M31) as a Function of Stellar Age. A.C.N. Quirk, P. Guhathakurta, L. Chemin, C.E. Dorman, K.M. Gilbert, A.C. Seth, B.F. Williams, and J.J. Dalcanton. *ApJ*, **871**, #11, 2019.

254. The Faint End of the Centaurus A Satellite Luminosity Function. D. Crnojević, D.J. Sand, P.N. Bennet, S. Pasetto, K. Spekkens, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. *ApJ*, **872**, #80, 2019.

255. HALO7D I: The Line of Sight Velocities of Distant Main Sequence Stars in the Milky Way Halo. E.C. Cunningham, A.J. Deason, C.M. Rockosi, P. Guhathakurta, Z.G. Jennings, E.N. Kirby, E. Toloba, and G. Barro. *ApJ*, **876**, #124, 2019.

256. A Dramatic Decrease in Carbon Star Formation in M31. M.L. Boyer, B.F. Williams, B. Aringer, Y. Chen, J.J. Dalcanton, L. Girardi, P. Guhathakurta, P. Marigo, K.A.G. Olsen, P. Rosenfield, and D.R. Weisz. *ApJ*, **879**, #109, 2019.

257. HALO7D II: The Halo Velocity Ellipsoid and Velocity Anisotropy with Distant Main Sequence Stars. E.C. Cunningham, A.J. Deason, R.E. Sanderson, S.T. Sohn, J. Anderson, P. Guhathakurta, C.M. Rockosi, R.P. van der Marel, S.R. Loebman, and A. Wetzel. *ApJ*, **879**, #120, 2019.

258. Elemental Abundances in M31: First Alpha and Iron Abundance Measurements in M31's Giant Stellar Stream. K.M. Gilbert, E.N. Kirby, I. Escala, J. Wojno, J.S. Kalirai, and P. Guhathakurta. *ApJ*, **883**, #128, 2019.

259. Deep ugrizY Imaging and DEEP2/3 Spectroscopy: A Photometric Redshift Testbed for LSST and Public Release of Data from the DEEP3 Galaxy Redshift Survey. R. Zhou, M.C. Cooper, J.A. Newman, M.L.N. Ashby, J. Aird, C.J. Conselice, M. Davis, A.A. Dutton, S.M. Faber, J.J. Fang, G.G. Fazio, P. Guhathakurta, D. Kocevski, D.C. Koo, K. Nandra, A.C. Phillips, D.J. Rosario, E.F. Schafly, J.R. Trump, B. Weiner, C.N.A. Willmer, and R. Yan. *MNRAS*, **488**, 4565–4584, 2019.

260. The Survey of Planetary Nebulae in Andromeda (M31) II. Age-Velocity Dispersion Relation in the Disc from Planetary Nebulae. S. Bhattacharya, M. Arnaboldi, N. Caldwell, O. Gerhard, M. Blaña, A. McConnachie, J. Hartke, P. Guhathakurta, C. Pulsoni, and K.C. Freeman. *A&A*, **631**, #A56, 2019.

261. Elemental Abundances in M31: The Kinematics and Chemical Evolution of Dwarf Spheroidal Satellite Galaxies. E.N. Kirby, K.M. Gilbert, I. Escala, J. Wojno, P. Guhathakurta, S.R. Majewski, and R.L. Beaton. *AJ*, **159**, #46, 2020.

262. Elemental Abundances in M31: A Comparative Analysis of Alpha and Iron Element Abundances in the the Outer Disk, Giant Stellar Stream, and Inner Halo of M31. I. Escala, K.M. Gilbert, E.N. Kirby, J. Wojno, E.C. Cunningham, and P. Guhathakurta. *ApJ*, **889**, #177, 2020.

263. The Next Generation Virgo Cluster Survey (NGVS). XIV. The Discovery of Low-mass Galaxies and a New Galaxy Catalog in the Core of the Virgo Cluster. L. Ferrarese, P. Côté, L.A. MacArthur, P.R. Durrell, S.D.J. Gwyn, P.-A. Duc, R. Sánchez-Janssen, M. Santos, J.P. Blakeslee, A. Boselli, F. Boyer, M. Cantiello, S. Courteau, J.-C. Culliandre, E. Emsellem, T. Erben, G. Gavazzi, P. Guhathakurta, M. Huertas-Company, A. Jordán, A. Lançon, C. Liu, S. Mei, J.C. Mihos, E.W. Peng, T.H. Puzia, J. Roediger, D. Schade, J.E. Taylor, E. Toloba, and H. Zhang. *ApJ*, **890**, #128, 2020.

264. Updated Constraints on Asteroid-Mass Primordial Black Holes as Dark Matter. N. Smyth, S. Profumo, S. English, T. Jeltema, K. McKinnon, and P. Guhathakurta. *Phys. Rev. D.*, **101**, #063005, 2020.

265. Elemental Abundances in M31: [Fe/H] and [α/Fe] in M31 Dwarf Galaxies Using Coadded Spectra. J. Wojno, K.M. Gilbert, E.N. Kirby, I. Escala, R.L. Beaton, E.J. Tollerud, S.R. Majewski, and P. Guhathakurta. *ApJ*, **895**, #78, 2020

266. Elemental Abundances in M31: Iron and Alpha Element Abundances in M31's Outer Halo. K.M. Gilbert, J. Wojno, E.N. Kirby, I. Escala, R.L. Beaton, P. Guhathakurta, and S.R. Majewski. *AJ*, **160**, #41, 2020.

267. Astrometry with the WFIRST Wide-Field Imager. R.E. Sanderson, A. Bellini, J.R. Liu, P. Melchior, D. Bennett, M. Shao, J. Rhodes, S. Malhotra, S. Gaudi, M. Fall, E. Nelan, P. Guhathakurta, J. Anderson, S. Ho, and M. Libralato (The WFIRST Astrometry Working Group). *J. Astronomical Telescopes, Instruments, & Systems*, in press, 2020 (arXiv:1712.05420).

268. Spatial and Kinematic Measurements of Andromeda's Massive Stars. J.R. Bulkley, A.C. Seth, L.C. Johnson, N. Caldwell, C. Dorman, P. Guhathakurta, J.J. Dalcanton, B. Kimmig, K. Hamren, D. Weisz, B. Williams, J. Kalirai, E. Skillman, and K. Gordon. *ApJ*, submitted, 2020.

269. The Next Generation Virgo Cluster Survey (NGVS). XXX. Ultra-Diffuse Galaxies and their Globular Cluster Systems. S. Lim, P. Côté, E.W. Peng, L. Ferrarese, J.C. Roediger, P.R. Durrell, J.C. Mihos, S.D.J. Gwyn, J.-C. Culliandre, C. Liu, R. Sánchez-Janssen, E. Toloba, L.V. Sales, P. Guhathakurta, A. Lançon, and T.H. Puzia. *ApJ*, submitted, 2020.

270. The Next Generation Virgo Cluster Survey. XXXIV. Ultra-Compact Dwarf (UCD) Galaxies in the Virgo Cluster. C. Liu, P. Côté, E.W. Peng, J.C. Roediger, H.-X. Zhang, L. Ferrarese, R. Sánchez-Janssen, P. Guhathakurta, X. Yang, Y. Jing, K. Alamo-Martínez, J.P. Blakeslee, A. Boselli, J.-C. Culliandre, P.-A. Duc, P.R. Durrell, S.D.J. Gwyn, A. Jordán, Y. Ko, A. Lançon, S. Lim, A. Longobardi, S. Mei, J.C. Mihos, R. Muñoz, M. Powalka, T.H. Puzia, C. Spengler, and E. Toloba. *ApJS*, submitted, 2020.

271. Project AMIGA: The Circumgalactic Medium of Andromeda. N. Lehner, S.C. Berek, J.C. Howk, B.P. Wakker, J. Tumlinson, E.B. Jenkins, J.X. Prochaska, R. Augustin, S. Ji, C.-A. Faucher-Giguère, Z. Hafen, M.S. Peeples, K.A. Barger, M.A. Berg, R. Bordoloi, T.M. Brown, A.J. Fox, K.M. Gilbert, P. Guhathakurta, J.S. Kalirai, F.J. Lockman, J.M. O'Meara, D.J. Pisano, J. Ribaudo, and J.K. Werk. *ApJ*, submitted, 2020 (arXiv:2002.07818).

272. Elemental Abundances in M31: Properties of the Inner Stellar Halo. I. Escala, E.N. Kirby, K.M. Gilbert, J. Wojno, E.C. Cunningham, and P. Guhathakurta. *ApJ*, submitted, 2020.

273. HST Proper Motions of NGC 147 and NGC 185: Orbital Histories and Tests of a Dynamically Coherent Andromeda Satellite Plane. S.T. Sohn, E. Patel, M.A. Fardal, G. Besla, R.P. van der Marel, M. Geha, and P. Guhathakurta. *ApJ*, submitted, 2020.

274. PHAT XX. AGB Stars and Other Cool Giants in M31 Star Clusters. L. Girardi, M.L. Boyer, L.C. Johnson, J.J. Dalcanton, P. Rosenfield, A.C. Seth, E.D. Skillman, D.R. Weisz, B.F. Williams, A.R. Bhattacharya, A. Bressan, N. Caldwell, Y. Chen, A.E. Dolphin, M. Fouesneau, S. Goldman, P. Guhathakurta, P. Marigo, S. Mukherjee, G. Pastorelli, A. Quirk, M. Soraisam, and M. Trabuchhi. *ApJ*, submitted, 2020.

ARTICLES IN EDITED CONFERENCE PROCEEDINGS, CIRCULARS, ETC.

1. VLA Observations of 24 Spiral Galaxies in the Virgo Cluster. V. Cayatte, J.H. van Gorkom, C. Balkowski, C.G. Kotanyi, and P. Guhathakurta. In: *Large Scale Structure and Motions in the Universe,* eds. M. Mezzetti, G. Guircin, F. Mardirossian, and M. Ramella (Kluwer: Dordrecht), 329, 1989.

2. Optical Characteristics of Galactic 100μm Cirrus. P. Guhathakurta and J.A. Tyson. In: *The Galactic and Extragalactic Background Radiation*, eds. S. Bowyer and C. Lienert (Kluwer: Dordrecht), 210–211, 1990.

3. Intergalactic HI in the NGC 5018 Group. P. Guhathakurta, G.R. Knapp, J.H. van Gorkom, and D.-W. Kim. In: *The Interstellar Medium in External Galaxies, NASA Conference Publication 3084*, eds. D.J. Hollenbach and H.A. Thornson Jr., 26–28, 1990.

4. Deep CCD Imaging in *U, B_J*, and *R*: Constraints on Galaxy Evolution. P. Guhathakurta, J.A. Tyson, and S.R. Majewski. In: *The Evolution of the Universe of Galaxies: The Hubble Centennial Symposium, ASP Conference Series 10*, ed. R. Kron (Astronomical Society of the Pacific: San Francisco), 304–306, 1990.

5. Supernova 1990B in NGC 4568. N. Suntzeff, M. Phillips, C. Sturch, J.A. Tyson, and P. Guhathakurta. *IAU Circ. 4961*, ed. G.V. Williams, 1, 1990.

6. The Nature of Faint Blue Galaxies. P. Guhathakurta. In: *After the First Three Minutes, AIP Conference Proceedings*, eds. S. Holt, C. Bennett, and V. Trimble, 322–325, 1991.

7. A VLA HI Survey of the Perseus-Pisces Region: Studying Low-Luminosity Dwarf Galaxies. P. Guhathakurta, A. Szomoru, D.H. Weinberg, and J.H. van Gorkom. In: *Physical Cosmology*, eds. A. Blanchard, L. Celnikier, M. Lachièze-Rey, and J. Trân Thanh Vân (Editions Frontières: Gif-sur-Yvette Cedex, France), 598–599, 1991.

8. Gravitational Lensing by Galaxy Clusters. P. Guhathakurta. In: *Clusters & Superclusters of Galaxies,* eds. M.M. Colless, A. Babul, A.C. Edge, R.M. Johnstone, and S. Raychaudhury (NATO ASI: Cambridge, UK), 55–56, 1991.

9. Clustering of Faint Galaxies. P. Guhathakurta, G. Efstathiou, G. Bernstein, J.A. Tyson and N. Katz. In: *Clusters & Superclusters of Galaxies,* eds. M.M. Colless, A. Babul, A.C. Edge, R.M. Johnstone, and S. Raychaudhury (NATO ASI: Cambridge, UK), 119–120, 1991.

10. Redshift Constraints and Clustering of Faint Galaxies. P. Guhathakurta. In: *The Early Observable Universe from Diffuse Backgrounds,* eds. B. Rocca-Volmerange, J.M. Deharveng, and J. Trân Thanh Vân (Editions Frontières: Gif-sur-Yvette Cedex, France), 155–166, 1991.

11. Faint Blue Galaxies: A New Population? P. Guhathakurta. In: *First Light in the Universe: Stars or QSO's?* eds. B. Rocca-Volmerange, B. Guiderdoni, M. Dennefeld, and J. Trân Thanh Vân (Editions Frontières: Gif-sur-Yvette Cedex, France), 165–167, 1993.

12. *HST* Observations of Globular Cluster Cores. B. Yanny, P. Guhathakurta, D.P. Schneider, and J.N. Bahcall. In: *Structure and Dynamics of Globular Clusters, ASP Conference Series 50*, ed. S.G. Djorgovski and G. Meylan (Astronomical Society of the Pacific: San Francisco), 275–283, 1993.

13. Stellar Photometry in the Core of 47 Tucanae using *HST*. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. In: *Structure and Dynamics of Globular Clusters, ASP Conference Series 50*, eds. S.G. Djorgovski and G. Meylan (Astronomical Society of the Pacific: San Francisco), 303–308, 1993.

14. An *HST* Study of Blue Stragglers in 47 Tucanae and M15. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. In: *Blue Stragglers*, *ASP Conference Series 53,* ed. R.A. Saffer (Astronomical Society of the Pacific: San Francisco), 60–70, 1993.

15. Optical Studies of High-Latitude Dust. P. Guhathakurta and R.M. Cutri. In: *The First Symposium on the Infrared Cirrus and Diffuse Interstellar Clouds, ASP Conference Series 58*, eds. R.M. Cutri and W.B. Latter (Astronomical Society of the Pacific: San Francisco), 34–44, 1994.

16. How Accurately Can Relative Distance be Measured Using the Tully-Fisher Relation? S. Raychaudhury, G. Bernstein, P. Guhathakurta, R. Giovanelli, M.P. Haynes, T. Herter, and N. Vogt. In: *Cosmic Velocity Fields*, eds. F.R. Bouchet and M. Lachièze-Rey (Editions Frontières: Gif-sur-Yvette Cedex, France), 79, 1994.

17. Highlights from the *Hubble Space Telescope*. M. Fall and P. Guhathakurta. In: *A Look at AURA 1994*, 6–9, 1994.

18. Detection of Lens Candidates for the Double QSO Q2345 + 007. P. Fischer, J.A. Tyson, G. Bernstein, and P. Guhathakurta. In: *Dark Matter*, *AIP Conference Proceedings 336*, eds. S.S. Holt and C.L. Bennett, 339, 1995.

19. Faint Blue Galaxies and Gravitational Lensing by Clusters of Galaxies. P. Guhathakurta. In: *Sixth Asian-Pacific Regional Meeting*, *J.Ap.A. Suppl.*, **16**, 119–123, 1995.

20. Cold, Warm and Hot Gas in the Merged Galaxy-Pair NGC 7252. P. Guhathakurta, J.E. Hibbard, J.H. van Gorkom, and F. Schweizer. In: *Sixth Asian-Pacific Regional Meeting*, *J.Ap.A. Suppl.,* **16**, 259–260, 1995.

21. *Hubble Space Telescope* Studies of the Dense Central Regions of Globular Clusters. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. In: *Dynamical Evolution of Star Clusters*, eds. J. Makino and P. Hut (Kluwer: Dordrecht), 19–28, 1996.

22. Preliminary Study of the Stellar Populations and Density Profile of NGC 6624 Using *HST*. P. Guhathakurta, B. Yanny, J.N. Bahcall, and D.P. Schneider. In: *Dynamical Evolution of Star Clusters*, eds. J. Makino and P. Hut (Kluwer: Dordrecht), 333, 1996.

23. How Good is the Near-IR Tully-Fisher Relation? G. Bernstein, P. Guhathakurta, and S. Raychaudhury. In *Spiral Galaxies in the Near Infrared*, eds. D. Minniti and H.-W. Rix (Springer-Verlag: Berlin), 200, 1996.

24. Isolating Red Giants in M31's Outer Spheroid: The Metallicity Gradient. D.B. Reitzel, P. Guhathakurta, and A. Gould. In: *Formation of the Halo....Inside and Out*, *ASP Conference Series 92*, eds. H. Morrison and A. Sarajedini (Astronomical Society of the Pacific: San Francisco), 540–543, 1996.

25. The Linewidth-Luminosity Relation for Blue Galaxies at a Redshift of ~ 0.25. H.-W. Rix, M.M. Colless, and P. Guhathakurta. In: *New Light on Galaxy Evolution*, eds. R. Bender and R.L. Davies (Kluwer: Dordrecht), 241–244, 1996.

26. Spatially Resolved Internal Kinematics of $z \approx 0.3$ Field Galaxies: Evidence for Rotation. P. Guhathakurta, K. Ing, H.-W. Rix, M.M. Colless, and T.B. Williams. In: *New Light on Galaxy Evolution*, eds. R. Bender and R.L. Davies (Kluwer: Dordrecht), 385, 1996.

27. Isolating Red Giants in M31's Outer Spheroid: The Metallicity Gradient. D. Reitzel, P. Guhathakurta, and A. Gould. In: *New Light on Galaxy Evolution*, eds. R. Bender and R.L. Davies (Kluwer: Dordrecht), 437, 1996.

28. Mass Functions and Stellar Populations of Globular Clusters. P. Guhathakurta, G. Piotto, and E. Vesperini. In: *Highlights of Astronomy, 11A*, ed. J. Andersen (Kluwer: Dordrecht), 603–605, 1998.

29. Local Group Suburbia: Red Giants in M31's Outer Spheroid and a Search for Stars in the Magellanic Stream. P. Guhathakurta and D.B. Reitzel. In: *Galactic Halos*, *ASP Conference Series 136*, ed. D. Zaritsky (Astronomical Society of the Pacific: San Francisco), 22–29, 1998.

30. Keck Spectra of M31 Halo Red Giant Stars. D.B. Reitzel and P. Guhathakurta. In: *Galactic Halos*, *ASP Conference Series 136*, ed. D. Zaritsky (Astronomical Society of the Pacific: San Francisco), 30–31, 1998.

31. Evolution and Internal Kinematics of Faint Blue Galaxies. P. Guhathakurta and K. Ing. In: *Highly Redshifted Radio Lines*, *ASP Conference Series 156*, eds. C.L. Carilli, S.J.E. Radford, K.M. Menten, and G.I. Langston (Astronomical Society of the Pacific: San Francisco), 113–120, 1999.

32. Possible Supernova in NGC 3198. A.V. Filippenko, T. Matheson, P. Guhathakurta, and A. Szomoru. *IAU Circ. 7150*, ed. D.W.E. Green, 2, 1999.

33. Supernova 1999cg in Anonymous Galaxy. A. Gal-Yam, D. Maoz, and P. Guhathakurta. *IAU Circ. 7198*, ed. D.W.E. Green, 1, 1999.

34. 1999 JV127. R.L. Allen, G. Bernstein, P. Guhathakurta, and G.V. Williams. *Minor Planet Electronic Circ.*, 1999–L18, 1999.

35. Six TNOs. R.L. Allen, G. Bernstein, P. Guhathakurta, and B.G. Marsden. *Minor Planet Electronic Circ.*, 1999–NO3, 1999.

36. 1999 KK17, 1999 KL17. R.L. Allen, M. Jarvis, P. Guhathakurta, G. Bernstein, and B.G. Marsden. *Minor Planet Electronic Circ.*, 1999–P08, 1999.

37. A Dwarf Galaxy Survey in the Local Volume. E.K. Grebel, P. Seitzer, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and A. Sarajedini. In: *Stars, Gas, and Dust in Galaxies: Exploring the Links, ASP Conference Series 221*, eds. D. Alloin, K. Olsen, and G. Galaz (Astronomical Society of the Pacific: San Francisco), 147–151, 2000.

38. Keck Studies of M31's Stellar Halo. P. Guhathakurta, D.B. Reitzel, and E.K. Grebel. In: *Discoveries and Research Prospects from 8- to 10-Meter-Class Telescopes, Proc. SPIE 4005*, ed. J. Bergeron, 168–179, 2000.

39. Metallicity, Kinematics and Structure of M31's Stellar Halo. D.B. Reitzel and P. Guhathakurta. In: *The Galactic Halo: From Globular Clusters to Field Stars, Proceedings of the 35th Liège International Astrophysical Colloquium*, eds. A. Noels, P. Magain, D. Caro, E. Jehin, G. Parmentier, and A. Thoul, 365–371, 2000.

40. Recent Results from *HST* Studies of the Dense Cores of Galactic Globular Clusters. P. Guhathakurta and J.H. Howell. In: *The Galactic Halo: From Globular Clusters to Field Stars, Proceedings of the 35th Liège International Astrophysical Colloquium,* eds. A. Noels, P. Magain, D. Caro, E. Jehin, G. Parmentier, and A. Thoul, 587–593, 2000.

41. Supernova 1999ct and No Supernova 1999cv. A. Gal-Yam, D. Maoz, and P. Guhathakurta. *IAU Circ. 7356,* ed. D.W.E. Green, 2, 2000.

42. The Disk/Halo Degeneracy and Spiral Lensing. A.H. Maller, J.R. Primack, L. Simard, P. Guhathakurta, J. Hjorth, A.O. Jaunsen, and R.A. Flores. In: *Gravitational Lensing: Recent Progress and Future Goals, ASP Conference Series 237,* eds. T.G. Brainerd and C.S. Kochanek (Astronomical Society of the Pacific: San Francisco), 91, 2001.

43. Keck Spectroscopy of Dwarf Elliptical Galaxies in the Virgo Cluster. M. Geha, P. Guhathakurta, and R. van der Marel. In: *The Shapes of Galaxies and their Dark Halos*, ed. P. Natarajan (World Scientific: Singapore), 154–157, 2002.

44. Keck Spectroscopy of Red Giants in M31's Stellar Halo. P. Guhathakurta. In: *The Shapes of Galaxies and their Dark Halos*, ed. P. Natarajan (World Scientific: Singapore), 162–169, 2002.

45. The Impact of Tidal Interactions on Satellite Galaxies: A Study of the M31 Satellites, M32 & NGC 205. P.I. Choi, P. Guhathakurta, and K.V. Johnston 2002. In: *The Shapes of Galaxies and their Dark Halos*, ed. P. Natarajan (World Scientific: Singapore), 222–225, 2002.

46. Deep Lens Survey. D.M. Wittman, J.A. Tyson, I.P. Dell'Antonio, A. Becker, V. Margoniner, J.G. Cohen, D. Norman, D. Loomba, G. Squires, G. Wilson, C.W. Stubbs, J. Hennawi, D.N. Spergel, P. Boeshaar, A. Clocchiatti, M. Hamuy, G. Bernstein, A. Gonzalez, P. Guhathakurta, W. Hu, U. Seljak, and D. Zaritsky. In: *Survey and Other Telescope Technologies and Discoveries, Proc. SPIE 4836*, eds. J.A. Tyson and S. Wolf, 73–82, 2002.

47. An *HST* Study of the Central Kinematics of M15. J. Gerssen, R.P. van der Marel, K. Gebhardt, P. Guhathakurta, R.C. Peterson, and C. Pryor. In: *New Horizons in Globular Cluster Astronomy, ASP Conference Series 296*, eds. G. Piotto, G. Meylan, S.G. Djorgovski, and M. Riello (Astronomical Society of the Pacific: San Francisco), 93, 2002.

48. A Deep, High-Resolution Study of the Core of 47 Tucanae. R. Guhathakurta. Presented at the KITP Conference: Globular Clusters: Formation, Evolution and the Role of Compact Objects, KITP, UCSB, 2003.

49. Science Objectives and Early Results of the DEEP2 Redshift Survey. M. Davis, S.M. Faber, J.A. Newman, A.C. Phillips, R.S. Ellis, C.C. Steidel, C. Conselice, A.L. Coil, D. Finkbeiner, D. Koo, P. Guhathakurta, B. Weiner, R. Schiavon, C. Willmer, N. Kaiser, G. Luppino, G. Wirth, A. Connolly, P. Eisenhardt, M. Cooper, and B. Gerke. In: *Discoveries and Research Prospects from 6- to 10-Meter-Class Telescopes II, Proc. SPIE 4834*, ed. P. Guhathakurta, 161–172, 2003.

50. Supernova 20021h. A. Gal-Yam, D. Maoz, F. Prada, P. Guhathakurta, A.V. Filippenko, R. Chornock, and G. Smith. *IAU Circ. 8169,* ed. D.W.E. Green, 2, 2003.

51. Supernova 2003il. A. Gal-Yam, D. Maoz, E.O. Ofek, D. Poznanski, K. Sharon, E. Medezinski, Y. Lipkin, F. Prada, P. Guhathakurta, P. Challis, T. Matheson, and R. Kirshner. *IAU Circ. 8212*, ed. D.W.E. Green, 2, 2003.

52. The Central Mass Concentration in M15. J. Gerssen, R.P. van der Marel, K. Gebhardt, P. Guhathakurta, R.C. Peterson, and C. Pryor. In: *Coevolution of Black Holes and Galaxies, Carnegie Observatories Centennial Symposium: Carnegie Obs. Astrophys. Ser.*, ed. L.C. Ho, 1–6, 2004. http://www.ociw.edu/ociw/symposia/series/symposium1/proceedings.html

53. Discovery of an Extended Halo of Metal-Poor Stars in the Andromeda Spiral Galaxy. P. Guhathakurta, J.C. Ostheimer, K.M. Gilbert, R.M. Rich, S.R. Majewski, J.S. Kalirai, D.B. Reitzel, M.C. Cooper, and R.J. Patterson. arXiv preprint, 2005 (astro-ph/0502366).

54. GRB 050908: DEIMOS Spectrum and Further Analysis. J.X. Prochaska, R.J. Foley, H.-W. Chen, J.S. Bloom, K. Hurley, M. Cooper, R. Guhathakurta, and W. Li. *GRB Coordinates Network*, **3971**, 1, 2005.

55. GRB 050904: Keck I-band Imaging. D. Perley, J.S. Bloom, M. Cooper, J. Newman, P. Guhathakurta, J.X. Prochaska, and H.-W. Chen. *GRB Coordinates Network*, **3932**, 1, 2005.

56. Supernovae in Galaxy Clusters. A. Gal-Yam, D. Maoz, K. Sharon, F. Prada, P. Guhathakurta, and A.V. Filippenko. In: *IAU Colloq. 192: Cosmic Explosions, On the 10th Anniversary of SN1993J*, *Springer Proceedings in Physics 99*, eds. J.M. Marcaide and K.W. Weiler (Berlin: Springer), 367–372, 2005

57. Carbon Stars in the M31 Dwarf Spheroidals: Evolutionary Implications. D. Harbeck, J.S. Gallagher, E.K. Grebel, and P. Guhathakurta. In: *Near-fields cosmology with dwarf elliptical galaxies*, *IAU Colloquia 198,* eds. H. Jerjen and B. Binggeli (Cambridge: Cambridge University Press), 30–34, 2005.

58. Dark matter or tidal disruption? The case for the Leo I dSph. S.T. Sohn, S.R. Majewski, J.C. Ostheimer, W.E. Kunkel, R.J. Patterson, M.H. Siegel, P. Guhathakurta, and M. Cooper. In: *Near-fields cosmology with dwarf elliptical galaxies*, *IAU Colloquia 198,* eds. H. Jerjen and B. Binggeli (Cambridge: Cambridge University Press), 263–264, 2005.

59. Constraining Dark Energy with the DEEP2 Redshift Survey. M. Davis, B.F. Gerke, J.A. Newman, and the DEEP2 Team. In: *Observing Dark Energy*, *ASP Conference Series 339, Proceedings of a meeting held 18–20 March 2004 in Tucson, Arizona*, eds. S.C. Wolff and T.R. Lauer (San Francisco: Astronomical Society of the Pacific), 128–139, 2005.

60. Measuring the Growth of Structure with Spectroscopically Identified Groups and Clusters. M. Davis, B.F. Gerke, A.L. Coil, M.C. Cooper, R. Yan, J.A. Newman, S.M. Faber, D. Koo, and P. Guhathakurta. White paper submitted to the Dark Energy Task Force Committee, 2005 (astro-ph/0507555).

61. Substructure in the Local Group. R. Guhathakurta. Presented at the KITP Conference: Applications of Gravitational Lensing: Unique Insights into Galaxy Formation and Evolution, KITP, UCSB, 2006.

62. dE Galaxies of the Local Group — Modeling Discrete Velocity Datasets. J. Chanamé, R. van der Marel, J. Kleyna, M. Geha, and R. Guhathakurta. In: *Dynamics of Galaxies* (Pulkovo Observatry, St. Petersburg, Russia), 3, 2007.

63. Substructure Along M 31's Southeast Minor Axis: The Forward Continuation of the Giant Southern Stream. K.M. Gilbert, M. Fardal, J.S. Kalirai, P. Guhathakurta, M.C. Geha, J. Isler, S.R. Majewski, J.C. Ostheimer, R.J. Patterson, D.B. Reitzel, E. Kirby, and M.C. Cooper. In: *Galaxies in the Local Volume*, *Astrophysics and Space Science Proceedings*, eds. B.S. Koribalski and H. Jerjen (Dordrecht: Springer), 223–226, 2008.

64. A Spectroscopic Survey of M31 Dwarf Spheroidal Galaxies. J.S. Kalirai, P. Guhathakurta, M.C. Geha, K.M. Gilbert, S.R. Majewski, and R.L. Beaton. In: *Galaxies in the Local Volume*, *Astrophysics and Space Science Proceedings*, eds. B.S. Koribalski and H. Jerjen (Dordrecht: Springer), 231–234, 2008.

65. The Origin of the Giant Stellar Stream of M 31. M. Tanaka, M. Chiba, Y. Komiyama, M. Iye, and P. Guhathakurta. In: *Galaxies in the Local Volume*, *Astrophysics and Space Science Proceedings*, eds. B.S. Koribalski and H. Jerjen (Dordrecht: Springer), 335–336, 2008.

66. A Subaru/Suprime-Cam Survey of the Andromeda Giant Stream: Constraints of the Dwarf Galaxy as the Stream's Progenitor. M. Tanaka, M. Chiba, Y. Komiyama, M. Iye and P. Guhathakurta. In: *Mapping the Galaxy and Nearby Galaxies, Astrophysics and Space Science Proceedings*, eds. K. Wada and F. Combes (Dordrecht: Springer), 381, 2008.

67. A Spectroscopic Survey of M31 DSph Galaxies. J.S. Kalirai, P. Guhathakurta, M.C. Geha, K.M. Gilbert, E. Kirby, S.R. Majewski, and R.L. Beaton. In: *Panoramic Views of Galaxy Formation and Evolution, ASP Conference Series 399, Proceedings of the conference held 11–16 December, 2007, at Shonan Village Center, Hayama, Japan*, eds. T. Kodama, T. Yamada, and K. Aoki (San Francisco: Astronomical Society of the Pacific), 465–466, 2008.

68. Iron and Alpha in Individual Red Giant Stars from Medium Resolution Spectra. E. Kirby, P. Guhathakurta, and C. Sneden. In: *Panoramic Views of Galaxy Formation and Evolution, ASP Conference Series 399, Proceedings of the conference held 11–16 December, 2007, at Shonan Village Center, Hayama, Japan*, eds. T. Kodama, T. Yamada, and K. Aoki (San Francisco: Astronomical Society of the Pacific), 467–468, 2008.

69. A Panoramic View of the Stellar Halo in My Neighbor Andromeda: A Metal Poor Halo Emerges in the North-West Fields. M. Tanaka, M. Chiba, Y. Komiyama, P. Guhathakurta, and M. Iye. In: *Panoramic Views of Galaxy Formation and Evolution, ASP Conference Series 399, Proceedings of the conference held 11–16 December, 2007, at Shonan Village Center, Hayama, Japan*, eds. T. Kodama, T. Yamada, and K. Aoki (San Francisco: Astronomical Society of the Pacific), 479–480, 2008.

70. The Role of Dwarf Galaxies in Building Large Stellar Halos. E.N. Kirby, P. Guhathakurta, J.S. Bullock, A. Frebel, M. Geha, K.M. Gilbert, M. Kaplinghat, M. Kuhlen, S.R. Majewski, B.E. Robertson, J.D. Simon, and M. Zemp. In: *Astro2010: The Astronomy and Astrophysics Decadal Survey, Scientific White Papers*, **156**, 2009.

71. Structure and Substructure of Galactic Spheroids. A.J. Romanowsky, J.P. Brodie, J.S. Bullock, R. Ciardullo, P. Guhathakurta, L. Hoffman, K.A.G. Olsen, J.R. Primack, and G. van de Ven. In: *Astro2010: The Astronomy and Astrophysics Decadal Survey, Scientific White Papers*, **251**, 2009.

72. Properties of Dark Matter Revealed by Astrometric Measurements of the Milky Way and Local Galaxies. E. Shaya, R. Olling, M. Ricotti, S.R. Majewski, R.J. Patterson, R. Allen, R. van der Marel, W. Brown, J. Bullock, A. Burkert, F. Combes, O. Gnedin, C. Grillmair, S. Kulkarni, P. Guhathakurta, A. Helmi, K. Johnston, P. Kroupa, G. Lake, B. Moore, and R.B. Tully. In: *Astro2010: The Astronomy and Astrophysics Decadal Survey, Scientific White Papers*, **274**, 2009.

73. An Era of Precision Astrophysics: Connecting Stars, Galaxies and the Universe. R.P. Olling, R.J. Allen, J. Anderson, B.C. Chaboyer, W. Freedman, P. Guhathakurta, K. Johnston, S. Kulkarni, S. Lépine, V.V. Makarov, E.E. Mamajek, A.C. Quillen, K.S. Sahu, A. Sarajedini, E.J. Shaya, D. Terndrup and P.A. Young. In: *Astro2010: The Astronomy and Astrophysics Decadal Survey, Scientific White Papers*, **226**, 2009.

74. AEGIS-X: Chandra Deep Survey (Laird+, 2009). E.S. Laird, K. Nandra, A. Georgakakis, J.A. Aird, P. Barmby, C.J. Conselice, A.L. Coil, M. Davis, S.M. Faber, G.G. Fazio, P. Guhathakurta, D.C. Koo, V. Sarajedini, and C.N.A. Willmer. *VizieR Online Data Catalog,* **218**, 00102, 2009.

75. M31's Giant Southern Stream: Constraints on the Progenitor's Mass Phase, and Rotation. M. Fardal, P. Guhathakurta, K. Gilbert, A. Babul, C. Dodge, M.D. Weinberg, and Y. Lu. In: *Galaxy Evolution: Emerging Insights and Future Challenges, ASP Conference Series 419, Proceedings of a conference held 11–14 November 2008 at the University of Texas, Austin, Texas, USA,* eds. S. Jogee, I. Marinova, L. Hao, and G.A. Blanc (San Francisco: Astronomical Society of the Pacific), 118–122, 2009.

76. Galactic Dynamics and Local Dark Matter. S.R. Majewski, J. Bullock, A. Burkert, B. Gibson, E. Grebel, O.Y. Gnedin, P. Guhathakurta, A. Helmi, K.V. Johnston, P. Kroupa, M. Metz, B. Moore, R.J. Patterson, E. Shaya, L.E. Strigari, and R. van der Marel. Chapter 4 in: *SIM Lite Astrometric Observatory: From Earth-Like Planets to Dark Matter*, eds. J. Davidson, S. Edberg, R. Danner, B. Nemati, and S. Unwin (NASA/JPL publication), 41–60, 2009 (arXiv:0902.2759).

77. Fundamental Stellar Properties from Eclipsing Binary Analyses. E.F. Milone, R. Stagg, P. Guhathakurta, D.A. VandenBerg, and J. Kallrath. In: *Star clusters: basic galactic building blocks throughout time and space, IAU Symposia 266, Proceedings of the International Astronomical Union*, eds. R. de Grijs and J.R.D. Lépine (Cambridge: Cambridge University Press), 477, 2010.

78. Deep Optical Photometry in M31 (Brown+, 2009). T.M. Brown, E. Smith, H.C. Ferguson, P. Guhathakurta, J.S. Kalirai, R.A. Kimble, A. Renzini, R.M. Rich, A.V. Sweigart, and D.A. Vandenberg. *VizieR Online Data Catalog,* **218**, 40152, 2010.

79. Extragalactic Background Light Inferred from AEGIS Galaxy SED-type Fractions. A. Domínguez, J.R. Primack, D.J. Rosario, F. Prada, R.C. Gilmore, S.M. Faber, D.C. Koo, R.S. Somerville, M.A. Pérez-Torres, P. Pérez-González, J.-S. Huang, M. Davis, P. Guhathakurta, P. Barmby, C.J. Conselice, M. Lozano, J.A. Newman, and M.C. Cooper. In: *Proceedings of Science* (25th Texas Symposium on Relativistic Astrophysics, Heidelberg, Germany; December 2010), 228, 2011.

80. The SPLASH Survey: Milky Way vs. M31 dSphs. J.S. Kalirai, R.L. Beaton, S.R. Majewski, J.C. Ostheimer, R.J. Patterson, M.C. Geha, K.M. Gilbert, P. Guhathakurta, E.N. Kirby, and J. Wolf. In: *EAS Publications Series*, **48**, 329–335, 2011.

81. Structure and Population of the NGC 55 Stellar Halo from a Subaru/Suprime-Cam Survey. M. Tanaka, M. Chiba, Y. Komyama, P. Guhathakurta, and J.S. Kalirai. In: *Galactic Archaeology: Near-Field Cosmology and the Formation of the Milky Way*, eds. W. Aoki, M. Ishigaki, T. Suda, T. Tsujimoto, and N. Arimoto (ASP Conf. Ser. **458**), 279, 2012.

82. Discovery of 14 Lithium-rich Red Giants in Milky Way Dwarf Satellite Galaxies. X. Fu, E.N. Kirby, P. Guhathakurta, and L. Deng. In: *Lithium in the Cosmos*, ed. P. Bonifacio (Memorie della Società Astronomica Italiana Supplementi), **22**, 92–96, 2012.

83. Addressing Decadal Survey Science through Community Access to Highly Multiplexed Spectroscopy with BigBOSS on the KPNO Mayall Telescope. C. Pilachowski et al. *White paper produced as input to the NSF–AST portfolio review*, 2012 (arXiv:1211.0285).

84. A Survey of Stellar Population Ages in the Halo of Andromeda. R. Guhathakurta and R. Beaton. In: *Science Highlights, National Optical Astronomy Observatory Newsletter*, Issue **107** (March), 4, 2013.

85. The Formation History of the Ultra-Faint Dwarf Galaxies. T.M. Brown, J. Tumlinson, M. Geha, E. Kirby, D.A. VandenBerg, J.S. Kalirai, J.D. Simon, R.J. Avila, R.R. Muñoz, P. Guhathakurta, A. Renzini, H.C. Ferguson, L.C. Vargas, and M. Gennaro. In: *EWASS 2013 Symposium 5: Local Group, Local Cosmology*, eds. S. Salvadori and M. Monelli (Memorie della Società Astronomica Italiana Supplementi), **75**, 282–286, 2013.

86. Local Group and Star Cluster Dynamics from HSTPROMO: The Hubble Space Telescope Proper Motion Collaboration. R.P. van der Marel, J. Anderson, A. Bellini, G. Besla, P. Bianchini, M. Boylan-Kolchin, J. Chanamé, A. Deason, T. Do, P. Guhathakurta, N. Kallivayalil, D. Lennon, D. Massari, E. Meyer, I. Platais, E. Sabbi, S.T. Sohn, M. Soto, M. Trenti, and L. Watkins. In: *Structure and Dynamics of Disk Galaxies*, eds. M.S. Seigar and P. Treuthardt (ASP Conf. Ser., Vol. 480), 43, 2014.

87. A New Approach to Detailed Structural Decomposition: Kicked-up Disk Stars in Andromeda's Halo? C.E. Dorman, L.M. Widrow, P. Guhathakurta, and the PHAT collaboration. In: *Structure and Dynamics of Disk Galaxies*, eds. M.S. Seigar and P. Treuthardt (ASP Conf. Ser., Vol. 480), 47, 2014.

88. Kinematically Decoupled Cores in Dwarf (Elliptical) Galaxies. E. Toloba, R.F. Peletier, P. Guhathakurta, G. van de Ven, S. Boissier, A. Boselli, M. den Brok, J. Falcón-Barroso, G. Hensler, J. Janz, E. Laurikainen, T. Lisker, S. Paudel, A. Ryś, and H. Salo. In: *Multi-Spin Galaxies*, eds. E. Iodice and E.M. Corsini (ASP Conf. Ser., Vol. 486), 109, 2014.

89. The Milky Way, Andromeda, and Distant Galaxies: Insights from Deep Keck Spectroscopic Surveys. R. Guhathakurta, E. Cunningham, A. Deason, C. Rockosi, G. Barro, E. Cheung, C. Conroy, S. Faber, Y. Guo, D. Koo, H. Yesuf, K. Gilbert, T. Sohn, R. van der Marel, and E. Kirby. In: *TMT in the Astronomical Landscape of the 2020s*, Thirty Meter Telescope Science Forum (16–19 July, 2014 in Tucson, AZ); online at http://conference.ipac.caltech.edu/tmtsf2014/, id. **5**, 2014.

90. Photometric Redshifts for the NGVS. A. Raichoor, S. Mei, T. Erben, H. Hildebrandt, M. Huertas-Company, O. Ilbert, R. Licitra, N.M. Ball, S. Boissier, A. Boselli, Y.-T. Chen, P. Côté, J.-C. Cuillandre, P.A. Duc, P.R. Durrell, L. Ferrarese, P. Guhathakurta, S.D.J. Gwyn, J.J. Kavelaars, A. Lançon, C. Liu, L.A. MacArthur, M. Muller, R.P. Muñoz, E.W. Peng, T.H. Puzia, M. Sawicki, E. Toloba, L. Van Waerbeke, D. Woods, and H. Zhang. In: *SF2A-2014: Proceedings of the Annual Meeting of the French Society of Astronomy and Astrophysics*, eds. J. Ballet, F. Martins, F. Bournaud, R. Monier, and C. Reylé, 359–362, 2014.

91. The Progression of Large-Scale Star Formation in Space and Time. D.A. Gouliermis, L.C. Beerman, L. Bianchi, J.J. Dalcanton, A.E. Dolphin, M. Fouesneau, K.D. Gordon, P. Guhathakurta, J. Kalirai, D. Lang, H.-W. Rix, A. Seth, E. Skillman, D.R. Weisz, and B.F. Williams. In *Lessons from the Local Group*, eds. K.C. Freeman, B.G. Elmegreen, D.L. Block, and M. Woolway (Springer: New York), in press, 2014 (arXiv:1407.0829).

92. Presenting Optical Spectra of AGB Stars in M31. K. Hamren, P. Guhathakurta, E. Toloba, C. Dorman, A. Seth, the SPLASH collaboration, and the PHAT collaboration. In *Why Galaxies Care About AGB Stars III*, eds. F. Kerschbaum, R.F. Wing, and J. Hron (ASP Conf. Ser., Vol. 497), 441, 2015.

93. Where is the Metallicity Ceiling to Form Carbon Stars? – A Novel Technique Reveals a Scarcity of Carbon Stars in the Inner Disk of M31. M.L. Boyer, L. Girardi, P. Marigo, B.F. Williams, B. Aringer, W. Nowotny, P. Rosenfield, C.E. Dorman, P. Guhathakurta, J.J. Dalcanton, J.L. Melbourne, K.A.G. Olsen, and D.R. Weisz. In *Why Galaxies Care About AGB Stars III*, eds. F. Kerschbaum, R.F. Wing, and J. Hron (ASP Conf. Ser., Vol. 497), 479, 2015.

94. Thirty-meter Telescope Detailed Science Case: 2015. W. Skidmore, TMT International Science Development Teams, and Science Advisory Committee, TMT. *Research in Astron. Astrophys.,* **15**, #1945, 2015 (arXiv:1505.01195).

95. Resolving the Extended Stellar Halos of Nearby Galaxies: The Wide-Field PISCeS Survey. D. Crnojević, D.J. Sand, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. In *The General Assembly of Galaxy Halos: Structure, Origin and Evolution*, eds. A. Bragaglia, M. Arnaboldi, M. Rejkuba, and D. Romano (Proc. IAU, Vol. 11, Issue S317), 21, 2016 (arXiv:1510.03487).

96. HALO7D: Investigating the Structure and Accretion History of the Milky Way Stellar Halo with HST Proper Motions and Keck Spectra. E.C. Cunningham, A. Deason, P. Guhathakurta, C. Rockosi, E. Kirby, R.P. van der Marel, and S.T. Sohn. In *The General Assembly of Galaxy Halos: Structure, Origin and Evolution*, eds. A. Bragaglia, M. Arnaboldi, M. Rejkuba, and D. Romano (Proc. IAU, Vol. 11, Issue S317), 288, 2016.

97. Maximizing Science in the Era of LSST: A Community-Based Study of Needed US Capabilities. J. Najita, B. Willman, D.P. Finkbeiner, R.J. Foley, S. Hawley, J.A. Newman, G. Rudnick, J.D. Simon, D. Trilling, R. Street, A. Bolton, R. Angus, E.F. Bell, D. Buzasi, D. Ciardi, J.R.A. Davenport, W. Dawson, M. Dickinson, A. Drlica-Wagner, J. Elias, D. Erb, L. Feaga, W.-F. Fong, E. Gawiser, M. Giampapa, P. Guhathakurta, J.L. Hoffman, H. Hsieh, E. Jennings, K.V. Johnston, V. Kashyap, T.S. Li, E. Linder, R. Mandelbaum, P. Marshall, T. Matheson, S. Meibom, B.W. Miller, J. O'Meara, V. Reddy, S. Ridgway, C.M. Rockosi, D.J. Sand, C. Schafer, S. Schmidt, B. Sesar, S.S. Sheppard, C.A. Thomas, E.J. Tollerud, J. Trump, and A. von der Linden. Preprint, 2016 (arXiv:1610.01661).

98. The Detailed Science Case for the Maunakea Spectroscopic Explorer: The Composition and Dynamics of the Faint Universe. A. McConnachie et al. Preprint, 2016 (arXiv:1606.00043).

99. A Tale of Tails. N. Brosch, S. Koriski, J. Murthy, A. Subbana, S. Ravichandran, J. van Gorkom, P. Guhathakurta, A. Mosenkov, and R.M. Rich. In IAU Symp 344, #24427, 2018.

100. The Wide Field Infrared Survey Telescope: 100 Hubbles for the 2020s. R. Akeson, L. Armus, E. Bachelet, V. Bailey, L. Bartusek, A. Bellini, D. Benford, D. Bennett, A. Bhattacharya, R. Bohlin, M. Boyer, V. Bozza, G. Bryden, S. Calchi Novati, K. Carpenter, S. Casertano, A. Choi, D. Content, P. Dayal, A. Dressler, O. Doré, S.M. Fall, X. Fan, X. Fang, A. Filippenko, S. Finkelstein, R. Foley, S. Furlanetto, J. Kalirai, B.S. Gaudi, K. Gilbert, J. Girard, K. Grady, J. Greene, P. Guhathakurta, C. Heinrich, S. Hemmati, D. Hendel, C. Henderson, T. Henning, C. Hirata, S. Ho, E. Huff, A. Hutter, R. Jansen, S. Jha, S. Johnson, D. Jones, J. Kasdin, P. Kelly, R. Kirshner, A. Koekemoer, J. Kruk, N. Lewis, B. Macintosh, P. Madau, S. Malhotra, K. Mandel, E. Massara, D. Masters, J. McEnery, K. McQuinn, P. Melchior, M. Melton, B. Mennesson, M. Peeples, M. Penny, S. Perlmutter, A. Pisani, A. Plazas, R. Poleski, M. Postman, C. Ranc, B. Rauscher, A. Rest, A. Roberge, B. Robertson, S. Rodney, J. Rhoads, J. Rhodes, R. Ryan Jr., K. Sahu, D. Sand, D. Scolnic, A. Seth, Y. Shvartzvald, K. Siellez, A. Smith, D. Spergel, K. Stassun, R. Street, L.-G. Strolger, A. Szalay, J. Trauger, M.A. Troxel, M. Turnbull, R. van der Marel, A. von der Linden, Y. Wang, D. Weinberg, B. Williams, R. Windhorst, E. Wollack, H.-Y. Wu, J. Yee, and N. Zimmerman. Preprint, 2019 (arXiv:1902.05569).

101. Astro2020 Science White Paper: Science at the Edges: Internal Kinematics of Globular Clusters' External Fields. A. Bellini, M. Libralato, J. Anderson, D. Bennett, A. Calamida, S. Casertano, S.M. Fall, B.S. Gaudi, P. Guhathakurta, S. Ho, J. Lu, S. Malhotra, P. Melchior, E. Nelan, J. Rhodes, R.E. Sanderson, M. Shao, S.T. Sohn, E. Vesperini, and R.P. van der Marel. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #173, 2019.

102. The Multidimensional Milky Way. R.E. Sanderson, J.L. Carlin, E.C. Cunningham, N. Camargo-Garavito, P. Guhathakurta, K.V. Johnston, C.F.P. Laporte, T.S. Li, and S.T. Sohn. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #347, 2019.

103. Astro2020 Science White Paper: Construction of an *L** Galaxy: The Transformative Power of Wide Fields for Revealing the Past, Present and Future of the Great Andromeda System. K.M. Gilbert, E.J. Tollerud, J. Anderson, R.L. Beaton, E.F. Bell, A. Brooks, T.M. Brown, J. Bullock, J.L. Carlin, M. Collins, A. Cooper, D. Crnojević, J. Dalcanton, A. del Pino, R. D'Souza, I. Escala, M. Fardal, A. Font, M. Geha, P. Guhathakurta, E. Kirby, G.F. Lewis, J.L. Marshall, N.F. Martin, K. McQuinn, A. Monachesi, E. Patel, M.S. Peeples, A. Pillepich, A.C.N. Quirk, R.M. Rich, S.T. Sohn, Y.-S. Ting, R.P. van der Marel, A. Wetzel, B.F. Williams, and J. Wojno. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #540, 2019.

104. Far Reaching Science with Resolved Stellar Populations in the 2020s. B. Williams, E.F. Bell, M.L. Boyer, J. Bullock, D. Crnojević, A. Dolphin, M.J. Durbin, R. D'Souza, K.M. Gilbert, L. Girardi, K.D. Gordon, P. Guhathakurta, D. Hendel, L.C. Johnson, K.V. Johnston, R. Khan, J. Kruk, K.B.W. McQuinn, M. Meixner, A. Monachesi, S. Pearson, M.S. Peeples, A.M. Price-Whelan, M. Rejkuba, J. Roman-Duval, B. Rose, D.J. Sand, D. Spergel, R.P. van der Marel, M.G. Walker, and. D.H. Weinberg. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #301, 2019.

105. FOBOS: A Next-Generation Spectroscopic Facility at the W. M. Keck Observatory. K. Bundy, K. Westfall, N. MacDonald, R. Kupke, M. Savate, C. Poppett, A. Alabi, G. Becker, J. Burchett, P. Capak, A. Coil, M. Cooper, D. Cowley, W. Deich, D. Dillon, J. Edelstein, P. Guhathakurta, J. Hennawi, M. Kassis, K.-G. Lee, D. Masters, T. Miller, J. Newman, J. O'Meara, J.X. Prochaska, M. Rau, J. Rhodes, R.M. Rich, C. Rockosi, A. Romanowsky, C. Schafer, D. Schlegel, A. Shapley, B. Siana, Y.-S. Ting, D. Weisz, M. White, B. Williams, G. Wilson, M. Wilson, and R. Yan. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #198, 2019.

106. The Importance of Supporting Astronomy Education Research, Curriculum Reform, and Professional Development in Astronomy Education. K. Coble, T. Rector, M.C. Odekon, R. GuhaThakurta, J. Bailey, L. Rebull, J.K. Faherty, and L. Corrales. *BAAS*, **51** (Astro2020: Decadal Survey on Astronomy and Astrophysics), #266, 2019.

107. Follow-up Observation of ZTF19abzpkss (AT2019qqk). M. Soraisam, R. Nunez, K. McKinnon, C.-H. Lee, P. Guhathakurta, T. Matheson, and A. Saha. *The Astronomer's Telegram*, #13178, 2019.

108. Spectroscopic Observation of the Superoutburst from HP Cet (ZTF19abydbvw) Dwarf Nova. M. Soraisam, R. Nunez, K. McKinnon, C.-H. Lee, P. Guhathakurta, P. Szkody, T. Matheson, and A. Saha. *The Astronomer's Telegram*, #13183, 2019.

109. The Properties of Bright Globular Clusters, Ultra-compact Dwarfs and Dwarf Nuclei in the Virgo Core: Hints on the Origin of Ultra-Compact Dwarf Galaxies (UCDs). C. Liu, E.W. Peng, P. Côté, H.-X. Zhang, L. Ferrarese, A. Jordán, J.C. Mihos, R.P. Muñoz, T.H. Puzia, A. Lançon, S. Gwyn, J.-C. Culliandre, J.P. Blakeslee, A. Boselli, P.R. Durrell, P.-A. Duc, P. Guhathakurta, L.A. MacArthur, S. Mei, R. Sánchez-Janssen, and H. Xu. In *Dwarf Galaxies: From the Deep Universe to the Present* (Proc. IAU, Vol. 344), 384–388, 2019.

110. Spectroscopic Classification AT2019udc with the Lick Shane Telescope. M.R. Siebert, G. Dimitriadis, C.D. Kilpatrick, R.J. Foley, R. Nunez, K. McKinnon, and P. Guhathakurta. *The Astronomer's Telegram*, #13263, 2019.

111. Spectroscopic Observation of the Transient ZTF19acnfsij/AT2019uiz in M31. M. Soraisam, C.-H. Lee, R. Nunez, K. McKinnon, P. Guhathakurta, T. Matheson, A. Saha, W. Zheng, A.V. Filippenko, and C.-C. Wei. *The Astronomer's Telegram*, #13317, 2019.

112. Spectroscopic Observation of the Transient ZTF19acqprad/AT2019uky in M31. M. Soraisam, C.-H. Lee, T. Matheson, R. Nunez, K. McKinnon, P. Guhathakurta, A. Saha, W. Zheng, A.V. Filippenko, and C.-C. Wei. *The Astronomer's Telegram*, #13362, 2019.

AAS/OTHER MEETING ABSTRACTS

1. A VLA HI Survey of the Rotation Curves of Virgo Cluster Spirals. J.H. van Gorkom, P. Guhathakurta, C.G. Kotanyi, and C. Balkowski. *BAAS*, **18**, 906, 1986.

2. Evidence for Dust in Elliptical Galaxies. P. Guhathakurta, G.R. Knapp, D.-W. Kim, and M. Jura. *BAAS*, **18**, 926, 1986.

3. Interstellar Dust in S0 Galaxies. D.-W. Kim, M. Jura, P. Guhathakurta, and G.R. Knapp. *BAAS*, **18**, 926, 1986.

4. HI Observations of the Elliptical Galalxies NGC 2974 and NGC 5018. D.-W. Kim, P. Guhathakurta, J.H. van Gorkom, M. Jura, and G.R. Knapp. *BAAS*, **19**, 1031, 1987.

5. IRAS Flux Densities for Early-Type Galaxies. G.R. Knapp, P. Guhathakurta, D.-W. Kim, and M. Jura. *BAAS*, **20**, 700, 1988.

6. Optical Properties of 100 μm Cirrus: A Red Emission Feature. P. Guhathakurta and J.A. Tyson. *BAAS*, **20**, 983, 1988.

7. Constraints on Galaxy Evolution from Deep Optical CCD Imaging Photometry. P. Guhathakurta. *BAAS*, **21**, 1164, 1989.

8. A Method for Deriving Rotation Curves from Kinematic Observations. M.P. Rupen and P. Guhathakurta. *BAAS*, **22**, 1240, 1990.

9. The Many Faces of IRAS 100 μm Cirrus Clouds: Dust, HACs, and Atomic and Molecular Gas. P. Guhathakurta, R.M. Cutri, J.H. van Gorkom, and G.R. Knapp. *BAAS*, **22**, 1245, 1990.

10. Angular Correlations of Faint Galaxies. G. Bernstein, J.A. Tyson, G. Efstathiou, N. Katz, and P. Guhathakurta. *BAAS*, **23**, 897, 1991.

11. Detection of Dwarf Stars at R ~ 85 kpc Near the Sextans Dwarf Spheroidal Galaxy. A. Gould, P. Guhathakurta, D. Richstone, and C. Flynn. *BAAS*, **23**, 1270, 1991.

12. Mapping Dark Matter in Galaxy Clusters by Lens Distortion. J.A. Tyson, G. Bernstein, P. Guhathakurta, and J. Miralda-Escude. *BAAS*, **23**, 1340, 1991.

13. Limits on the Surface Density of Faint Kuiper Belt Objects. J.A. Tyson, P. Guhathakurta, G. Bernstein, and P. Hut. *BAAS*, **181**, 6.10, 1992.

14. Globular Cluster Photometry with *HST*: Color-Magnitude Diagrams in the Dense Cores of 47 Tuc and M15. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. *BAAS*, **181**, 43.07, 1992.

15. Optical and Infrared Color Variations in Selected Infrared Cirrus Clouds. R.M. Cutri and P. Guhathakurta. *BAAS*, **181**, 48.03, 1992.

16. An Improved Tully-Fisher Relation using *H*-band Infrared Imaging. G. Bernstein, P. Guhathakurta, and S. Raychaudhury. *BAAS*, **181**, 65.13, 1992.

17. Radial Density Profiles in the Centers of 47 Tuc and M15 from *HST* images. B. Yanny, P. Guhathakurta, D.P. Schneider, and J.N. Bahcall. *BAAS*, **181**, 108.02, 1992.

18. The Centers of Two Very Dense Globular Clusters. B. Yanny, P. Guhathakurta, D.P. Schneider, and J.N. Bahcall. *BAAS*, **183**, 24.02, 1993.

19. Early Results from the *HST* Medium Deep Survey with WFPC2. R.E. Griffiths, K.U. Ratnatunga, S. Casertano, M. Im, E.W. Wyckoff, R.A. Windhorst, P. Schmidtke, S. Pascarelle, S. Mutz, R.S. Ellis, G. Gilmore, K. Glazebrook, R.A.W. Elson, R.F. Green, V. Sarajedini, J.P. Huchra, G.D. Illingworth, D.C. Koo, A.C. Phillips, D.A. Forbes, M.A. Bershady, J.A. Tyson, P. McIlroy, and P. Guhathakurta. *BAAS*, **184**, 12.09, 1994.

20. *I*-Band CCD Surface Photometry and a Total Magnitude for M31. P. Guhathakurta, S. Raychaudhury, and A. Berlind. *BAAS*, **184**, 48.07, 1994.

21. Structural Properties of Faint Galaxies with *HST*. S. Casertano, K.U. Ratnatunga, R.E. Griffiths, L.W. Neuschaefer, R.A. Windhorst, R.S. Ellis, G. Gilmore, R.F. Green, J.P. Huchra, G.D. Illingworth, D.C. Koo, J.A. Tyson, and P. Guhathakurta. *BAAS*, **184**, 61.11, 1994.

22. Wide-Field Optical Imaging of Interstellar Cirrus Clouds. R. Cutri and P. Guhathakurta. *BAAS*, **185**, 12.07, 1995.

23. The Metallicity Gradient of the M31 Spheroid. D. Reitzel, P. Guhathakurta, and A. Gould. *BAAS*, **185**, 76.10, 1995.

24. *HST* WFPC2 Study of the Density Profile and Stellar Populations in M15. P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall. *BAAS*, **185**, 104.14, 1995.

25. Spatially-Resolved Internal Kinematics of $z = 0.3$ Field Galaxies: Evidence for Rotation. K. Ing, P. Guhathakurta, H.-W. Rix, M.M. Colless, and T.B. Williams. *BAAS*, **187**, 48.16, 1996.

26. Properties of New M31 dSph Companions from Keck Imaging. E.K. Grebel and P. Guhathakurta. *BAAS*, **193**, 8.02, 1998.

27. Properties of Nearby Dwarf Galaxy Candidates from an MDM/Keck Imaging Survey. P. Guhathakurta, E.K. Grebel, and P. Seitzer. *BAAS*, **193**, 8.03, 1998.

28. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates I. P. Seitzer, E. Grebel, A. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and A. Sarajedini. *BAAS*, **195**, 8.01, 1999.

29. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates. II. Distance to the M81/NGC 2403 Complex Via dSph Galaxies Imaged with WFPC2. I.D. Karachenstsev, V.E. Karachentseva, A.E. Dolphin, D. Geisler, E.K. Grebel, P. Guhathakurta, P.W. Hodge, A. Sarajedini, P. Seitzer, and M.E. Sharina. *BAAS*, **195**, 8.02, 1999.

30. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates. III. Resolved Dwarf Galaxies In and Beyond the Local Group. E.K. Grebel, P.Seitzer, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, A. Sarajedini, and M.E. Sharina. BAAS, **195**, 8.03, 1999.

31. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates. IV. Photometry with *HST*phot. A.E. Dolphin, E.K. Grebel, P. Seitzer, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, A. Sarajedini, and M.E. Sharina. *BAAS*, **195**, 8.04, 1999.

32. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates V. Using the E/S0 Galaxy Maffei I as a Background Light Screen to Study Foreground Galactic Dust. P. Guhathakurta, A.E. Dolphin, D. Geisler, E.K. Grebel, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, A. Sarajedini, and P. Seitzer. *BAAS*, **195**, 8.05, 1999.

33. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates VI. KK83 and KK256, Two Contrasting Galaxies Beyond the Fringe. P.W. Hodge, A. Dolphin, D. Geisler, E. Grebel, P. Guhathakurta, I.D. Karachentsev, V.E. Karachentseva, P. Seitzer, and A. Sarajedini. *BAAS*, **195**, 8.06, 1999.

34. The *HST* Search for Planets in the Globular Cluster 47 Tucanae. R.L. Gilliland, M.D. Albrow, T.M. Brown, D. Charbonneau, A. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, P. Guhathakurta, P. Choi, J.H. Howell, D.N.C. Lin, S.S. Vogt, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, A. Sarajedini, S. Sigurdsson, and A. VandenBerg. *BAAS*, **196**, 2.02, 2000.

35. *HST* Photometry of 47 Tucanae: Time Series Analysis and Search for Giant Planets. T.M. Brown, D. Charbonneau, R.L. Gilliland, M.D. Albrow, A.S. Burrows, W.D. Cochran, N.Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, P. Guhathakurta, P.Choi, J.H. Howell, D.N.C. Lin, S.S. Vogt, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, A. Sarajedini, S. Sigurdsson, and D.A. VandenBerg. *BAAS*, **196**, 2.03, 2000.

36. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates: Summary of Current Results. P. Seitzer, E.K. Grebel, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and A. Sarajedini. *BAAS*, **196**, 29.01, 2000.

37. Blue Stragglers in the Core of 47 Tucanae (NGC 104): Bonus of an *HST* Planetary Search. P. Guhathakurta, J.H. Howell, A. Sarajendini, R. L. Gilliland, M.D. Albrow, T.M. Brown, D. Charbonneau, A.S. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, D.N.C. Lin, S.S. Vogt, P. Choi, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, S. Sigurdsson, and D.A. VandenBerg. *BAAS*, **196**, 41.07, 2000.

38. Extreme Mass Segregation in the Core of 47 Tucanae (NGC 104): Bonus of an *HST* Planetary Search. J.H. Howell, P. Guhathakurta, A. Sarajedini, R.L. Gilliland, M.D. Albrow, T.M. Brown, D. Charbonneau, A.S. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, D.N.C. Lin, S.S. Vogt, P. Choi, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, S. Sigurdsson, and D.A. VandenBerg. *BAAS*, **196**, 41.08, 2000.

39. Eclipsing Binaries in 47 Tuc: Bonus of an *HST* Planetary Search. E.F. Milone, C.R. Stagg, M.D. Williams, T.M. Brown, D. Charbonneau, R.L. Gilliland, M.D. Albrow, A.S. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, P. Guhathakurta, P. Choi, D.N.C. Lin, S.S. Vogt, J.H. Howell, G.W. Marcy, M. Mayor, D. Naef, A. Sarajedini, S. Sigurdsson, and D.A. VandenBerg. *BAAS*, **196**, 46.03, 2000.

40. Discovery of a Globular Cluster in M31's Dwarf Spheroidal Companion Andromeda I. E.K. Grebel, A.E. Dolphin, and P. Guhathakurta. *AGM*, **17**, 61, 2000.

41. First Results from an *HST* Snapshot Survey for Nearby Dwarf Galaxy Candidates. E.K. Grebel, P. Seitzer, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and A. Sarajedini. *AGM*, **17**, 69, 2000.

42. *HST* Photometry of 47 Tucanae: Time Series Analysis and Search for Giant Planets. T.M. Brown, D. Charbonneau, R.L. Gilliland, M.D. Albrow, A.S. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, P. Guhathakurta, P. Choi, J.H. Howell, D.N.C. Lin, S.S. Vogt, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, A. Sarajedini, S. Sigurdsson, and D.A. VandenBerg. *IAU Symposia*, **202**, E39, 2000.

43. Galaxy Interactions in the Andromeda Sub-Group: M31, M32, & NGC 205. P.I. Choi, P. Guhathakurta, and K.V. Johnston. *BAAS*, **197**, 28.04, 2000.

44. Kinematics and Metallicity of M31 Halo Giants from a Keck Spectroscopic Study. D.B. Reitzel and P. Guhathakurta. *BAAS*, **197**, 28.05, 2000.

45. Is There an Extreme Warp in the Disk of the Andromeda Spiral Galaxy? P. Guhathakurta, P.I. Choi, and D.B. Reitzel. *BAAS*, **197**, 37.02, 2000.

46. Insights into Tidal Disruption of Satellite Galaxies from Numerical Simulations. K.V. Johnston, P.I. Choi, and P. Guhathakurta. **197**, 37.03, 2000.

47. *HST* Optical Studies of *Chandra* X-ray Sources in 47 Tucanae. P.D. Edmonds, C.O. Heinke, R.L. Gilliland, J.E. Grindlay, M.D. Albrow, P. Guhathakurta, J.H. Howell, S.S. Murray, and A. Sarajedini. *BAAS*, **197**, 84.04, 2000.

48. The *HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates. P. Seitzer, E.K. Grebel, A.E. Dolphin, D. Geisler, P. Guhathakurta, P.W. Hodge, I.D. Karachentsev, V.E. Karachentseva, and A. Sarajedini. *BAAS*, **198**, 9.09, 2001.

49. *HST* Studies of the Core of 47 Tucanae. J.H. Howell, J.A. Warren, P. Guhathakurta, R.L. Gilliland, M.D. Albrow, A. Sarajedini, T.M. Brown, D. Charbonneau, A.S. Burrows, W.D. Cochran, N. Baliber, P.D. Edmonds, S. Frandsen, H. Bruntt, D.N.C. Lin, S.S. Vogt, P. Choi, G.W. Marcy, M. Mayor, D. Naef, E.F. Milone, C.R. Stagg, M.D. Williams, S. Sigurdsson, and D.A. VandenBerg. *BAAS*, **198**, 95.05, 2001.

50. Stellar Kinematics in M15. J. Gerssen, R.P. van der Marel, P. Dubath, K. Gebhardt, P. Guhathakurta, R. Peterson, and C. Pryor. *BAAS*, **199**, 56.10, 2001.

51. The Deep Lens Survey Image and Catalog Public Database. I. Dell'Antonio, J.A. Tyson, D. Wittman, A. Becker, V. Margoniner, G. Wilson, and the DLS Team. *BAAS*, **199**, 101.12, 2002.

52. The Deep Lens Survey: Overview. J.A. Tyson, D. Wittman, I. Dell'Antonio, A. Becker, V. Margoniner, and the DLS Team. *BAAS*, **199**, 101.13, 2001.

53. The Deep Lens Survey: Real-time Optical Transient and Moving Object Detection. A. Becker, D. Wittman, C. Stubbs, I. Dell'Antonio, D. Loomba, R. Schommer, J.A. Tyson, V. Margoniner, and the DLS Collaboration. *BAAS*, **199**, 101.14, 2001.

54. Internal Dynamics of Dwarf Elliptical Galaxies. M. Geha, P. Guhathakurta, and R.P. van der Marel. *BAAS*, **199**, 153.04, 2001.

55. Measuring the Slope of the Galactic Dust Extinction Law, R_V, in the Direction of Differentially-Reddened Globular Clusters. J. Melbourne and P. Guhathakurta. *BAAS*, **200**, 73.01, 2002.

56. Deep *HST* Photometry in a Distant M31 Major Axis Field: Evidence for an Intermediate Age Stellar Population Near G1. R.M. Rich, D. Reitzel, K. Gebhardt, L.C. Ho, and P. Guhathakurta. *BAAS*, **201**, 14.09, 2002.

57. Red Giants in the Outer Halo of M31: Keck Spectroscopy in the Vicinity of G1. D.B. Reitzel, P. Guhathakurta, and R.M. Rich. *BAAS*, **201**, 14.10, 2002.

58. Keck Spectroscopy of Red Giants in the Outer Halo of M31: Discovery of a New Minor-Axis Debris Trail. P. Guhathakurta and D.B. Reitzel. *BAAS*, **201**, 14.11, 2002.

59. Keck Spectroscopy of Red Giants in the M31 dSph Satellites: Dynamics. L.Pittroff, P. Guhathakurta, S. Datta, E. Grebel, and S. Vogt. *BAAS*, **201**, 14.13, 2002.

60. Keck Spectroscopy of Red Giants in the M31 dSph Satellites: Chemical Abundance Spread. S. Datta, L. Pittroff, P. Guhathakurta, E. Grebel, and D. Harbeck. *BAAS*, **201**, 14.14, 2002.

61. Rotation Versus Anisotropy in Dwarf Elliptical Galaxies. M. Geha, P. Guhathakurta, and R. van der Marel. *BAAS*, **201**, 26.02, 2002.

62. The DEEP2 Galaxy Redshift Survey: An Overview. D.C. Koo and the DEEP Team. *BAAS*, **201**, 137.01, 2002.

63. The DEEP2 Redshift Survey: Techniques and First Results. M.C. Cooper and the DEEP2 Team. *BAAS*, **201**, 137.03, 2002.

64. The DEEP Galaxy Redshift Survey: The Color-Luminosity Distribution of Galaxies. B.J. Weiner and the DEEP Team. *BAAS*, **201**, 137.04, 2002.

65. The DEEP Redshift Survey: The Galaxy Luminosity Function at $z \sim 1$. C.N.A. Willmer and the DEEP Team. *BAAS*, **201**, 137.05, 2002.

66. Ages and Metal Abundances of Early-Type Field Galaxies at Redshifts $z \sim 0.8$. R.P. Schiavon and the DEEP Team. *BAAS*, **201**, 137.06, 2002.

67. Novel Sky Subtraction Techniques for the DEEP2 Galaxy Redshift Survey. B. Gerke and the DEEP2 Team. *BAAS*, **201**, 137.07, 2002.

68. Measuring the Angular Power Spectrum of Dust Clouds in the Direction of Differentially-Reddened Globular Clusters. J. Melbourne and P. Guhathakurta. In: *Astrophysics of Dust*, ed. A.N. Witt, 48, 2003.

69. Target Selection for the DEEP2 Redshift Survey. J. Newman and the DEEP2 Team. *BAAS*, **203**, 106.01, 2003.

70. Evolution of High Redshift Bulges. D.C. Koo and the DEEP Collaboration. *BAAS*, **203**, 106.02, 2003.

71. Initial Results of the Palomar DEEP2 Infrared Survey. C.J. Conselice, K. Bundy, U. Vivian, R.S. Ellis, P.J. Eisenhardt, and the DEEP2 Team. *BAAS*, **203**, 106.03, 2003.

72. Galaxy Clustering in the DEEP2 Redshift Survey. A. Coil and the DEEP2 Team. *BAAS*, **203**, 106.04, 2003.

73. Mock Catalogue for the DEEP2 Redshift Survey. R. Yan, M. White, and the DEEP2 Team. *BAAS*, **203**, 106.05, 2003.

74. The Stellar Mass Function at $z \sim 1$. K. Bundy, C.J. Conselice, R. Ellis, P.J. Eisenhardt, and the DEEP2 Team. *BAAS*, **203**, 106.06, 2003.

75. Environmental Dependence of Galaxy Properties at $z \sim 0$ to $z \sim 1$. M.C. Cooper and the DEEP2 Team. *BAAS*, **203**, 106.07, 2003.

76. The DEEP2 Galaxy Redshift Survey: First Results on Galaxy Groups. B.F. Gerke and the DEEP2 Team. *BAAS*, **203**, 106.08, 2003.

77. The DEEP2 Redshift Survey: Probing the Dark Matter Density Profile at $z \sim 1$. C.F. Conroy and the DEEP2 Redshift Survey Team. *BAAS*, **203**, 119.03, 2003.

78. Ultra-Deep Keck Spectroscopy of Early-type Galaxies in GOODS-N. T. Treu, R. Ellis, T. Liao, P. van Dokkum, and the DEEP2 Team. *BAAS*, **205**, 31.02, 2004.

79. DEEP2: The Spitzer Stellar Mass Function at $z \sim 1$. K. Bundy, C.J. Conselice, R.S. Ellis, P.R. Eisenhardt, and the DEEP2 Team. *BAAS*, **205**, 38.02, 2004.

80. The Palomar Observatory Wide-Field Infrared Survey: Tracing the Evolution of Massive and Red Galaxies to $z \sim 1.5$. C.J. Conselice, K. Bundy, R. Ellis, P. Eisenhardt, and the DEEP2 Team. *BAAS*, **205**, 81.08, 2004.

81. A Spectroscopic Survey of M31 Red Giants with Keck/DEIMOS: The Andromeda Halo at Intermediate Radii. S.R. Majewski, J. Kalirai, K. Gilbert, P. Guhathakurta, J. Clem, M. Cooper, J. Hesser, C. Luine, D. Reitzel, R.M. Rich, and P. Stetson. *BAAS*, **205**, 141.13, 2004.

82. A Spectroscopic Survey of M31 Red Giants with Keck/DEIMOS: Isolating a Clean Sample in the Outer Halo. K.M. Gilbert, P. Guhathakurta, J. Kalirai, M. Cooper, S. Majewski, J. Ostheimer, D. Reitzel, and R.M. Rich. *BAAS*, **205**, 141.14, 2004.

83. A Spectroscopic Survey of M31 Red Giants with Keck/DEIMOS: Insights into the Progenitor of the Giant Southern Stream. P. Guhathakurta, K. Gilbert, J. Kalirai, A. Font, K. Johnston, M. Cooper, C. Luine, S. Majewski, J. Ostheimer, D. Reitzel, and R.M. Rich. *BAAS*, **205**, 141.15, 2004.

84. A Spectroscopic Survey of M31 Red Giants with Keck/DEIMOS: Clumpy Velocity Distributions in Distant Halo Fields. C. Luine, R.M. Rich, K. Gilbert, J. Kalirai, P. Guhathakurta, M. Cooper, S. Majewski, J. Ostheimer, and D. Reitzel. *BAAS*, **205**, 141.16, 2004.

85. The Mass-Dependent Evolution of Field Galaxies. K. Bundy, R.S. Ellis, C.J. Conselice, M. Cooper, B. Weiner, J. Taylor, C. Willmer, and the DEEP2 Team. *BAAS*, **207**, 52.04, 2005.

86. Mass-dependent Star Formation Histories of Field Galaxies in the EGS. K.G. Noeske and the Extended Groth Strip Collaboration. *BAAS*, **207**, 52.05, 2005.

87. Star Formation History in the Extended Groth Strip—Constraints from GALEX (UV) and Optical Photometry. S. Salim, S. Charlot, R.M. Rich, D. Schiminovich, the GALEX Team, and the DEEP2 Team. *BAAS*, **207**, 52.06, 2005.

88. VLA Radio Survey of EGS. R. Ivison, S. Chapman, I. Smail and the EGS-DEEP2 Teams. *BAAS*, **207**, 80.08, 2005.

89. A Binary AGN at $z = 0.71$ in the Extended Groth Strip. B.F. Gerke and the EGS Collaboration. *BAAS*, **207**, 80.09, 2005.

90. IRAC and K-band Colors of Galaxies as a Function of Redshift. S.M. Faber, J.-S. Huang, K.G. Noeske, K. Bundy, the DEEP2 Team, the IRAC GTO Team, and the Palomar K-band Team. *BAAS*, **207**, 80.11, 2005.

91. Galaxy Kinematics in the DEEP2 Survey: Evolution in the Tully-Fisher Relation to $z > 1$. B.J. Weiner, C.N.A. Willmer, S. Kassin, S.M. Faber, and the DEEP2 Collaboration. *BAAS*, **207**, 80.12, 2005.

92. The Tully-Fisher Relation at $0.9 < z < 1.4$ in the Extended Groth Strip. A.J. Metevier, S.J. Kannappan, A.C. Phillips, and the EGS Consortium Team. *BAAS*, **207**, 80.13, 2005.

93. The DEEP2 Galaxy Redshift Survey: The Relationship between Galaxy Properties and Environment at $z \sim 1$. M.C. Cooper and the DEEP2 Team. *BAAS*, **207**, 80.15, 2005.

94. The DEEP2 redshift survey and the Extended Groth Strip Collaboration. M. Davis, the DEEP2 Team, and the Extended Groth Strip Collaboration. *BAAS*, **207**, 80.16, 2005.

95. The Spectral Energy Distributions of EGS Galaxies from the X-Ray to the Mid Infrared. N.P. Konidaris and the Extended Groth Strip Collaboration. *BAAS*, **207**, 80.17, 2005.

96. The Metal-Poor Halo of the Andromeda Spiral Galaxy (M31). J.S. Kalirai, K.M. Gilbert, P. Guhathakurta, S.R. Majewski, J.C. Ostheimer, D.B. Reitzel, R.M. Rich, M.C. Cooper, and R.J. Patterson. *BAAS*, **207**, 105.01, 2005.

97. Adaptive Optics Observations of Star Forming Regions in the Core of the Galaxy Merger NGC 6240. L.K. Pollack, C.E. Max, and P. Guhathakurta. *BAAS*, **207**, 128.07, 2005.

98. Discovery of an Extended Metal-Poor Stellar Halo in the Andromeda Spiral Galaxy. P. Guhathakurta, K.M. Gilbert, J.S. Kalirai, J.C. Ostheimer, S.R. Majewski, R.J. Patterson, R.M. Rich, D.B. Reitzel, and M.C. Cooper. *BAAS*, **207**, 135.01, 2005.

99. Dynamics and Metallicities of Red Giant Stars in the Metal-Rich Spheroid of the Andromeda Spiral Galaxy. K.M. Gilbert, R.M. Rich, D.B. Reitzel, J.S. Kalirai, P. Guhathakurta, M.C. Cooper, and S.R. Majewski. *BAAS*, **207**, 135.02, 2005.

100. Unveiling the Boxy Bulge and Bar of the Andromeda Spiral Galaxy. R.L. Beaton, E. Athanassoula, S.R. Majewski, P. Guhathakurta, M.F. Skrutskie, R.J. Patterson, and M. Bureau. *BAAS*, **207**, 135.03, 2005.

101. Dynamical Constraints on the Disk and Spheroid of the Andromeda Spiral Galaxy from Keck Spectroscopy. D.B. Reitzel, J.S. Kalirai, P. Guhathakurta, R.M. Rich, K.M. Gilbert, S.R. Majewski, J.C. Ostheimer, M.C. Cooper, and R.J. Patterson. *BAAS*, **207**, 135.04, 2005.

102. The Violent History of Andromeda. T.M. Brown, E. Smith, P. Guhathakurta, R.M. Rich, H.C. Ferguson, A. Renzini, A.V. Sweigart, and R.A. Kimble. *BAAS*, **207**, 135.05, 2005.

103. Chemical Abundance Patterns in Red Giant Branch Stars in the Andromeda Spiral Galaxy. C. Luine, J.S. Kalirai, K.M. Gilbert, P. Guhathakurta, R.C. Peterson, R.M. Rich, D.B. Reitzel, R.P. Schiavon, and S.R. Majewski. *BAAS*, **207**, 135.06, 2005.

104. A Test for Temporal and Spatial Variation in the Fine Structure Constant using DEEP2 Redshift Survey Data. J.A. Newman and the DEEP2 Team. *BAAS*, **207**, 152.07, 2005.

105. AGN Origin of [OII] in Red Galaxies—Implications for Post-starburst Galaxy Studies. R. Yan and the DEEP2 Team. *BAAS*, **207**, 161.06, 2005.

106. The Star Formation History in Andromeda's Diffuse Stellar Halo. T.M. Brown, E. Smith, H. Ferguson, P. Guhathakurta, R. Rich, J. Kalirai, A. Renzini, and A. Sweigart. *BAAS*, **209**, 4.17, 2006.

107. A Three-Dimensional View of the Environments of Three Strong Gravitational Lenses. L.A. Moustakas, P. Marshall, and the AEGIS Collaboration. *BAAS*, **209**, 21.01, 2006.

108. A Spectroscopic Study of M31 dSphs-Kinematics, Chemical Abundances, and Radial Distributions in And I, II, and III. S.R. Majewski, J. Kalirai, M. Geha, P. Guhathakurta, K. Gilbert, J. Ostheimer, and R. Patterson. *BAAS*, **209**, 87.06, 2006.

109. The Advanced Camera Galaxy Redshift Survey. B.L. Frye, N. Benitez, D. Coe, H. Ford, D. Bowen, G. Illingworth, P. Guhathakurta, M. Franx, and the Advanced Camera Survey Team. *BAAS*, **209,** 132.07, 2006.

110. The Surface Brightness Profile of the Bulge and Halo of the Andromeda Spiral Galaxy (M31) from R = 10 to 165 kiloparsecs. P. Guhathakurta, K. Gilbert, J. Kalirai, J. Ostheimer, S. Majewski, R. Patterson, M. Geha, M. Cooper, D. Reitzel, and R. Rich. *BAAS*, **209**, 177.01, 2006.

111. New Substructure in the Spheroid of the Andromeda Spiral Galaxy. K. Gilbert, J. Isler, J. Kalirai, M. Fardal, P. Guhathakurta, R.M. Rich, D. Reitzel, S. Majewski, M. Cooper, M. Geha, J. Ostheimer, and R. Patterson. *BAAS*, **209**, 177.02, 2006.

112. Unraveling NGC 205's Interaction with Andromeda (M31). K. Howley, M. Geha, P. Guhathakurta, R. Montgomery, and G. Laughlin. *BAAS*, **209**, 177.03, 2006.

113. Reconstructing a Recent Collision in Andromeda. M. Fardal, P. Guhathakurta, A. Babul, A. McConnachie, and C. Dodge. *BAAS*, **209,** 177.04, 2006.

114. Constraints on the Chemical Evolution of the M31 Spheroid. H.C. Ferguson, O. Certik, T. Brown, E. Smith, M. Rich, R. Guhathakurta, J. Kalirai, A. Renzini, and A. Sweigart. *BAAS*, **209**, 177.05, 2006.

115. Characterizing the Metallicity Distribution of the Extended Bulge of the Andromeda Spiral Galaxy (M31). J.C. Isler, J. Kalirai, K. Gilbert, P. Guhathakurta, M. Geha, S. Majewski, J. Ostheimer, R. Patterson, D. Reitzel, and R. Rich. *BAAS*, **209**, 177.07, 2006.

116. Keck/Deimos Spectroscopy of Distant M31 fields with Deep *HST* Imaging. R.M. Rich, T.M. Brown, D.B. Reitzel, H. Ferguson, A. Koch, E. Smith, P. Guhathakurta, J. Kalirai, A. Renzini, R. Kimble, A. Sweigart, K. Gilbert, M. Chiba, M. Iye, Y. Komiyama, and M. Tanaka. *BAAS*, **209**, 177.08, 2006.

117. Are Massive Galaxies Formed by $z \sim 1$? C. Conselice and the AEGIS Team. *BAAS*, **209**, 181.02, 2006.

118. Redshift Identification of Single-Line Emission Galaxies in the DEEP2 Survey. E. Kirby, P. Guhathakurta, S.M. Faber, and B.J. Weiner. *BAAS*, **209**, 181.04, 2006.

119. Galaxies in Transition: AGN Activity and Environments of Post-starburst Galaxies. R. Yan and the DEEP2 Team. *BAAS*, **209**, 181.05, 2006.

120. The Stellar Mass Tully-Fisher Relation to $z = 1.2$. S.A. Kassin, B. Weiner, S. Faber, D. Koo, J. Lotz, and the DEEP2 Team. *BAAS*, **209**, 181.06, 2006.

121. History and Modes of Star Formation Since *z* 1 in Field Galaxies: A New Picture from the AEGIS Collaboration. K. Noeske and the AEGIS collaboration. *BAAS*, **209**, 195.05, 2006.

122. Characterizing the Metallicity Distribution of the Inner Spheroid of Andromeda Spiral Galaxy (M31). J. Isler, J. Kalirai, K. Gilbert, P. Guhathakurta, M. Geha, S. Majewski, J. Ostheimer, D. Reitzel, and R. Rich. *BAAS*, **210**, 81.06, 2007.

123. The Global Characteristics and Merger History of Andromeda's Stellar Halo. K. Gilbert, P. Guhathakurta, J. Kalirai, M. Geha, K. Johnston, S. Majewski, E. Kirby, R. Patterson, R. Beaton, P. Kollipara, and J. Ostheimer. *BAAS,* **211**, 26.04, 2007.

124. A Spectroscopic Study of M31 dSphs—Kinematics, Chemical Abundances, and Radial Distributions in And I, II, III, X, and XIV. J.S. Kalirai, M.C. Geha, P. Guhathakurta, K.M. Gilbert, S.R. Majewski, and R.L. Beaton. *BAAS,* **211**, 26.05, 2007.

125. The Tangential Motion of the Andromeda Spiral Galaxy and its System of Satellites. P. Guhathakurta, R. van der Marel, K.M. Gilbert, J.S. Kalirai, P. Kollipara, B. Yniguez, M.C. Geha, S.R. Majewski, R.L. Beaton, R.J. Patterson, and SPLASH collaboration. *BAAS,* **211**, 26.06, 2007.

126. Darwin Tames an Andromeda Dwarf: Unraveling the Orbit of NGC 205 Using a Genetic Algorithm. K. Howley, M. Geha, P. Guhathakurta, R. Montgomery, G. Laughlin, and K.V. Johnston. *BAAS,* **211**, 26.07, 2007.

127. Photometry of the Outer Halo of M31. R. Beaton, S. Majewski, R. Patterson, P. Guhathakurta, K. Gilbert, J. Kalirai, E. Kirby, and J. Ostheimer. *BAAS,* **211**, 104.17, 2007.

128. Iron and Alpha from Medium Resolution Spectra of Individual Stars. E. Kirby, P. Guhathakurta, and C. Sneden. *BAAS,* **211**, 104.18, 2007.

129. Results from the SPLASH Survey: Spectroscopic and Photometric Landscape of Andromeda's Stellar Halo. P. Guhathakurta and the SPLASH collaboration. *BAAS,* **213**, 317.03, 2009.

130. Stellar Kinematics in the Region of M32. K. Howley, B. Yniguez, P. Guhathakurta, J. Kalirai, E. Kirby, and M. Geha. *BAAS,* **213**, 317.04, 2009.

131. How to Build the Milky Way Stellar Halo: An Inspection of the dSph Building Blocks. E. Kirby, P. Guhathakurta, J.D. Simon, M. Geha, C. Sneden, and A. Frebel. *BAAS,* **213**, 317.06, 2009.

132. M31 Dwarf Galaxy Dark Matter Halos. J. Wolf, L. Strigari, J. Bullock, M. Kaplinghat, J. Kalirai, E. Kirby, P. Guhathakurta, K. Gilbert, M. Geha, R. Beaton, R. Patterson, S. Majewski, and D. Zucker. *BAAS,* **213**, 419.12, 2009.

133. Chemical Evolution of Milky Way Satellite Galaxies as a Function of Galaxy Luminosity. E. Kirby, M. Bolte, A. Frebel, M.C. Geha, P. Guhathakurta, J.D. Simon, and C. Sneden. *BAAS,* **215**, 318.01, 2010.

134. The SPLASH Survey: Spectroscopy of Newly Discovered Tidal Streams in the Outer Halo of the Andromeda Galaxy. P. Guhathakurta, R. Beaton, J. Bullock, M. Chiba, M. Fardal, M. Geha, K. Gilbert, K. Howley, M. Iye, K. Johnston, J. Kalirai, E. Kirby, Y. Komiyama, S. Majewski, R. Patterson, M. Tanaka, E. Tollerud, and SPLASH collaboration. *BAAS,* **215**, 354.01, 2010.

135. A Kinematic Survey of M32. K. Howley, B. Yniguez, P. Guhathakurta, J. Kalirai, M. Geha, E. Kirby, R. van der Marel, and J.C. Cuillandre. *BAAS,* **215**, 354.02, 2010.

136. *HST*/ACS Observations of RR Lyrae Stars in Six Ultra-deep Fields of M31. E. Jeffery, T.M. Brown, E. Smith, H.C. Ferguson, P. Guhathakurta, J.S. Kalirai, R.A. Kimble, A. Renzini, R.M. Rich, A.V. Sweigart, and D.A. VandenBerg. *BAAS,* **215**, 417.13, 2010.

137. Investigating M32's Stellar Population: Stellar Kinematics and the NIR CMD. A. Rudy, P.I. Choi, B.R. Horn, A. Berti, and P. Guhathakurta. *BAAS*, **216**, 421.07, 2010.

138. Keck Spectroscopy of M31's HST/MCT Region. II: Kinematical and Spectral Characteristics of Stellar Subpopulations. P. Guhathakurta, C.E. Dorman, K.M. Howley, J. Bullock, J. Cuillandre, J. Dalcanton, K. Gilbert, J. Kalirai, A. Kniazev, A. Seth, B. Williams, and the SPLASH and PHAT collaborations. *BAAS*, **217**, 207.02, 2011.

139. Keck Spectroscopy of M31's HST/MCT Region. I: Stellar Kinematics of the Disk and Bulge. C. Dorman, K.M. Howley, P. Guhathakurta, J. Bullock, J. Consiglio, J. Cuillandre, J. Dalcanton, K. Gilbert, J. Kalirai, A. Seth, B. Williams, B. Yniguez, and the SPLASH and PHAT collaborations. *BAAS*, **217**, 207.03, 2011.

140. The SPLASH Survey: Internal Stellar Kinematics of the Nearby Compact Elliptical M32. K. Howley, P. Guhathakurta, M. Geha, J. Kalirai, R. van der Marel, B. Yniguez, J. Cuillandre, and K. Gilbert. *BAAS*, **217**, 207.04, 2011.

141. Mapping the Stellar Content of the Milky Way with LSST. J. Bochanski, P. Thorman, K. Covey, K. Olsen, S. Dhital, T.C. Beers, P. Boeshaar, P. Cargile, M. Catelan, S. Digel, P. Guhathakurta, T. Henry, Z. Ivezic, M. Juric, J. Kalirai, J. Kirkpatrick, P.M. McGehee, D. Minniti, A. Mukadam, J. Pepper, A. Prsa, R. Roškar, J. Smith, K. Stassun, A. Tyson, and LSST Stellar Populations and Milky Way and Local Volume Science Collaborations. *BAAS*, **219**, 156.06, 2012.

142. Kinematics of M31 dSphs and Implications for LCDM. E.J. Tollerud, R.L. Beaton, M. Geha, P. Guhathakurta, J.S. Bullock, J.S. Kalirai, E.N. Kirby, and M. Boylan-Kolchin. *BAAS*, **219**, 201.04, 2012.

143. Discovery of Super-Lithium Rich Red Giants in Milky Way Satellite Galaxies. E. Kirby, X. Fu, and P. Guhathakurta. *BAAS*, **219**, 230.06, 2012.

144. Detailed Chemical Abundances of Andromeda Satellites from Co-added Spectra. L. Cheng, P. Guhathakurta, E. Kirby, L. Yang, and SPLASH collaboration. *BAAS*, **219**, 244.18, 2012.

145. Semi-automated Search for Lyman-alpha and Other Emission Lines in the DEEP2 and DEEP3 Databases. K. McCormick, A. Alvarez-Buylla, V. Dean, P. Guhathakurta, K. Lai, M. Sawicki, B. Lemaux, C. Grishaw-Jones, DEEP2, and DEEP3. *BAAS*, **219**, 340.04, 2012.

146. Kinematics of M31's Inner Spheroid Using SPLASH and PHAT Data. C. Dorman, P. Guhathakurta, M.A. Fardal, M.C. Geha, K.M. Howley, J.S. Kalirai, D. Lang, J. Cuillandre, J. Dalcanton, K.M. Gilbert, A.C. Seth, B.F. Williams, and B. Yniguez. *BAAS*, **219**, 346.08, 2012.

147. A Study of the Kinematics of Stellar Sub-populations in M31's Disk and Spheroid Using PHAT and SPLASH Data. P. Guhathakurta, C. Dorman, A. Seth, J. Dalcanton, K. Gilbert, K. Howley, L.C. Johnson, J. Kalirai, T. Krause, D. Lang, B. Williams, the PHAT team, and the SPLASH collaboration. *BAAS*, **219**, 346.10, 2012.

148. The Panchromatic Hubble Andromeda Treasury. Bright UV Stars in the Bulge of M31. P. Rosenfield, L. Johnson, L. Girardi, J.J. Dalcanton, A. Bressan, D. Lang, B.F. Williams, K.M. Howley, P. Guhathakurta, and the Panchromatic Hubble Andromeda Treasury Survey Team. *BAAS*, **219**, 346.11, 2012.

149. Using Dwarf Spheroidal Satellites as Probes of Galaxy Properties. A. Choudhury, P. Guhathakurta, K.M. Gilbert, R.L. Beaton, E.J. Tollerud, and the SPLASH collaboration. *BAAS*, **219**, 346.19, 2012.

150. A Study of Tidal Streams in the Via Lactea II Simulation. A. Suvarna, V. Rashkov, and P. Guhathakurta. *BAAS*, **219**, 346.22, 2012.

151. The LAMOST-PLUS Partnership: The Pilot Survey Begins. H.J. Newberg, Z. Bai, T. Beers, J. Carlin, J. Chen, L. Chen, Y. Chu,L. Deng, X. Fu, C. Grillmair, P. Guhathakurta, J. Hou, J. Hu, S. Lépine, H. Li, J. Li, C. Liu, X. Liu, A. Luo, H. Morrison, E. Peng, J. Sellwood, X.X. Xue, Y. Xu, L. Yang, B. Yanny, J. Yu, Y. Zhang, H. Zhang, G. Zhao, Y. Zhao, Z. Zheng, J. Zhong, Participants in LAMOST, US (PLUS), and LAMOST (Guoshoujing). *BAAS*, **219**, 428.21, 2012.

152. Kinematics of the Diffuse Ionized Gas Disk of Andromeda. A. Thelen, K. Howley P. Guhathakurta, C. Dorman, and the SPLASH collaboration. *BAAS*, **219**, 441.02, 2012.

153. The Formation History of the Ultra-Faint Dwarf Galaxies. T.M. Brown, J. Tumlinson, M.C. Geha, R. Muñoz, E. Kirby, J.S. Kalirai, D.A. VandenBerg, R. Avila, J.D. Simon, H.C. Ferguson, and P. Guhathakurta. *BAAS*, **220**, 428.05, 2012.

154. The Luminosity Profile and Structural Parameters of M31 (Andromeda Galaxy). S. Courteau, L. Widrow, M. McDonald, P. Guhathakurta, Y. Zhu, R.L. Beaton, and S.R. Majewski. *BAAS*, **220**, 524.17, 2012.

155. The SPLASH Survey: Photometric Properties of Sixteen Andromeda dSphs. R. Beaton, S.R. Majewski, R.J. Patterson, J.C. Ostheimer, P. Guhathakurta, E.J. Tollerud, M.C. Geha, and the SPLASH team. *BAAS*, **221**, 122.04, 2013.

156. Probing the Inner Halo of M31 with Blue Horizontal Branch Stars. B.F. Williams, J. Dalcanton, E.F. Bell, K. Gilbert, P. Guhathakurta, T.R. Lauer, A. Seth, J.S. Kalirai, P. Rosenfield, and the PHAT team. *BAAS*, **221**, 122.06, 2013.

157. Spectroscopic and Photometric Properties of Carbon Stars in the Disk of the Andromeda Galaxy. P. Guhathakurta, E. Toloba, S. Guha, C. Rushing, C. Dorman, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **221**, 122.07, 2013.

158. The PHAT and SPLASH Surveys: Rigorous Structural Decomposition of the Andromeda Galaxy. C. Dorman, P. Guhathakurta, L. Widrow, D. Foreman-Mackey, A. Seth, J. Dalcanton, K. Gilbert, D. Lang, B.F. Williams, the SPLASH team, and the PHAT team. *BAAS*, **221**, 146.09, 2013.

159. The SPLASH Survey: Surface Brightness Profile and Metallicity Gradient of Andromeda's Stellar Halo. K. Gilbert, R. Beaton, J. Bullock, M. Chiba, M.C. Geha, P. Guhathakurta, J.S. Kalirai, E.N. Kirby, S.R. Majewski, R.J. Patterson, M. Tanaka, E.J. Tollerud, and the SPLASH collaboration. *BAAS*, **221**, 146.16, 2013.

160. Search for High-Redshift Lyman-Alpha Emitters in the DEEP3 Galaxy Redshift Survey. V. Dean, P. Guhathakurta, K. McCormick, Z. Zheng, and the DEEP3 and DEEP2 galaxy redshift survey teams. *BAAS*, **221**, 147.42, 2013.

161. Properties of Dwarf Ellipticals in Low-Density Environments. D. Sur, P. Guhathakurta, and E. Toloba. *BAAS*, **221**, 242.06, 2013.

162. Do All Stars Form in Clusters?: Masses and Ages of Young Supergiants in Andromeda. Z. Choudhury, C. Debs, E.N. Kirby, and P. Guhathakurta. *BAAS*, **221**, 250.09, 2013.

163. Evidence for Past Mass Loss from the Low-Mass Halo Clusters AM 4 and Palomar 13. K. Hamren, G.H. Smith, and P. Guhathakurta. *BAAS*, **221**, 250.25, 2013.

164. Update on the LAMOST-PLUS collaboration. J.L. Carlin, H.J. Newberg, L. Deng, Z. Bai, T.C. Beers, J. Chen, L. Chen, Y. Chu, X. Fu, S. Gao, C.J. Grillmair, P. Guhathakurta, J. Hou, S. Lépine, H. Li, J. Li, C. Liu, X. Liu, A. Luo, E. Peng, J. Sellwood, Y. Xu, X. Xue, F. Yang, L. Yang, B. Yanny, J. Yu, H. Zhang, Y. Zhang, G. Zhao, Y. Zhao, Z. Zheng, and J. Zhong. *BAAS*, **221**, 254.15, 2013.

165. Modeling Substructure in the Milky Way Galaxy. C. Grishaw-Jones, P. Thorman, T. Iyer, P. Guhathakurta, and the Deep Lens Survey collaboration. *BAAS*, **221**, 254.24, 2013.

166. Keck Spectroscopy of the PHAT Region. C. Dorman, P. Guhathakurta, A. Seth, the PHAT team, and the SPLASH team. *BAAS*, **221**, 311.06, 2013.

167. Creating a Stellar Thermometer Using the Spectral Characteristics of M Giants in Andromeda. T. Krause, P. Guhathakurta, K. Hamren, E. Toloba, C. Dorman, and L. Woloshyn. *BAAS*, **221**, 351.03, 2013.

168. Dark Matter Halos of Dwarf Early-Type Galaxies in the Virgo Cluster. E. Toloba and P. Guhathakurta. In *Probes of Dark Matter on Galaxy Scales* (AAS Topical Conf. Ser. Vol. 1), *BAAS*, **45**, #7, #104.01, 2013.

169. Dark Matter Content of Dwarf Early-Type Galaxies in the Coma Cluster. P. Guhathakurta and E. Toloba. In *Probes of Dark Matter on Galaxy Scales* (AAS Topical Conf. Ser. Vol. 1), *BAAS*, **45**, #7, #401.03, 2013.

170. Profiling Andromeda's Metal Poor Population. D. Gregersen, A. Seth, J. Dancanton, B.F. Williams, C. Dorman, P. Guhathakurta, and the PHAT team. *BAAS*, **223**, 152.03, 2014.

171. High Resolution Spectroscopic Measurements of Stars in the Milky Way. C. Debs, E.N. Kirby, and P. Guhathakurta. *BAAS*, **223**, 152.05, 2014.

172. The Evolving Mixture of Barium Isotopes in Milky Way Halo Stars. Z. Choudhury, E.N. Kirby, and P. Guhathakurta. *BAAS*, **223**, 152.06, 2014.

173. Stellar Isotopic Abundances in the Milky Way: Insights into the Origin of Carbon and Neutron-Capture Elements. M. Guo, A. Zhang, E.N. Kirby, and P. Guhathakurta. *BAAS*, **223**, 152.07, 2014.

174. Kinematics of Andromeda's Stellar Disk. C. Dorman, P. Guhathakurta, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **223**, 309.03, 2014.

175. Life in the Outer Limits: Insight into Hierarchical Merging from the Outermost Structure of the Andromeda Stellar Halo. R. Beaton, S.R. Majewski, R.J. Patterson, P. Guhathakurta, K. Gilbert, J.S. Kalirai, E.J. Tollerud, and the SPLASH team. *BAAS*, **223**, 329.03, 2014.

176. Accretion History and Mass of the Milky Way Halo: HST Proper Motions and Keck Spectra. E.C. Cunningham, A.J. Deason, P. Guhathakurta, C.M. Rockosi, G. Barro, R.P. van der Marel, S. Sohn, J. Anderson, the HSTPROMO collaboration, and the HALO7D collaboration. *BAAS*, **223**, 346.09, 2014.

177. The M31 Asymptotic Giant Exploration Survey: Intermediate-Age Stellar Content in Andromeda VII. K. Hamm, R. Beaton, K. Hamren, M.L. Boyer, P. Guhathakurta, S.R. Majewski, and the M31AGES collaboration. *BAAS*, **223**, 355.03, 2014.

178. The Formation History of the Ultra-Faint Dwarf Galaxies. T.M. Brown, J. Tumlinson, M.C. Geha, E.N. Kirby, D.A. VandenBerg, J.S. Kalirai, J.D. Simon, R.J. Avila, R. Muñoz, P. Guhathakurta, A. Renzini, H.C. Ferguson, L.C. Vargas, and M. Gennaro. *BAAS*, **223**, 355.05, 2014.

179. Keck Spectroscopy and NGVS Photometry in the Direction of the Virgo Cluster: Globular Cluster Satellites of Dwarf Ellipticals, Milky Way Halo Substructure, and Large-scale Structure in the Background. M. Muller, E. Toloba, P. Guhathakurta, S. Yagati, J. Chen, P. Côté, C. Dorman, L. Ferrarese, E.W. Peng, and the Next Generation Virgo Survey collaboration. *BAAS*, **223**, 355.20, 2014.

180. Globular Clusters as Tracers of Dark Matter in Virgo Cluster Dwarf Elliptical Galaxies. S. Chen, E. Toloba, P. Guhathakurta, J. Chen, P. Côté, L. Ferrarese, E.W. Peng, and the NGVS collaboration. *BAAS*, **223**, 355.21, 2014.

181. A Spectral Analysis of a Rare "Dwarf Eat Dwarf" Cannibalism Event. K. Theakanath, E. Toloba, P. Guhathakurta, A.J. Romanowsky, N. Ramachandran, and J. Arnold. *BAAS*, **223**, 355.24, 2014.

182. Kinematically-Decoupled Cores in Dwarf Ellipticals in the Virgo Cluster: Implications for Infallen Groups in Clusters. E. Toloba, P. Guhathakurta, G. van de Ven, A. Boselli, T. Lisker, R. Peletier, and the SMAKCED collaboration. *BAAS*, **223**, 428.06, 2014.

183. Carbon Stars in Andromeda. I. Detection and Spectroscopic Properties. K. Hamren, E. Toloba, C. Dorman, P. Guhathakurta, M. Chang, S. Guha, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **223**, 434.02, 2014.

184. Carbon Stars in Andromeda. II. Demographics and Photometric Properties. P. Guhathakurta, K. Hamren, C. Dorman, E. Toloba, A. Seth, J. Dalcanton, A. Nayak, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **223**, 434.03, 2014.

185. Detecting Reddening by Dust for Star Clusters in the Andromeda Galaxy. A. Cohn, C. Dorman, P. Guhathakurta, and the PHAT collaboration. *BAAS*, **223**, 442.31, 2014.

186. The C/M Ratio in the Disk of M31. K. Hamren, M.L. Boyer, P. Guhathakurta, the SPLASH collaboration, and the PHAT collaboration. *BAAS*, **225**, 133.06, 2015.

187. Dissecting the Milky Way Disk with LAMOST. J.L. Carlin, H.J. Newberg, C. Liu, T.C. Beers, X. Chen, K. Grabowski, P. Guhathakurta, S. Lépine, X. Liu, A.-L. Luo, H.-J. Tian, B. Yanny, H. Yuan, H. Zhang, G. Zhao, Y. Zhao, and Z. Zheng. *BAAS*, **225**, 142.16, 2015.

188. Stellar Kinematics and Structural Properties of Virgo Cluster Dwarf Early-Type Galaxies from the SMAKCED Project. E. Toloba, P. Guhathakurta, R. Peletier, A. Boselli, T. Lisker, E. Emsellem, J.D. Simon, G. van de Ven, and the SMAKCED collaboration. *BAAS*, **225**, 212.04, 2015.

189. Next Generation Virgo Survey Photometry and Keck/DEIMOS Spectroscopy of Globular Cluster Satellites of Dwarf Elliptical Galaxies in the Virgo Cluster. P. Guhathakurta, E. Toloba, E.W. Peng, B. Li, S. Gwyn, L. Ferrarese, P. Côté, J. Chu, L. Sparkman, S. Chen, S. Yagati, M. Muller, and the Next Generation Virgo Survey collaboration. *BAAS*, **225**, 212.05, 2015.

190. Kinematic Anomalies in Dwarf Elliptical Galaxies: New Constraints on Current Evolutionary Models. A. Nene, A. Wu, E. Toloba, and P. Guhathakurta. *BAAS*, **225**, 248.03, 2015.

191. Centaurus A through the Eye of the PiSCES: A Plethora of New Satellites and Streams. D. Crnojević, D.J. Sand, N. Caldwell, P. Guhathakurta, B.A. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. *BAAS*, **225**, 248.05, 2015.

192. New, Faint Satellite Galaxies of NGC 253. D.J. Sand, D. Crnojević, N. Caldwell, P. Guhathakurta, B.A. McLeod, A. Seth, J.D. Simon, and J. Strader. *BAAS*, **225**, 248.06, 2015.

193. Comparing Chemical Compositions of Dwarf Elliptical Galaxies and Globular Clusters. J. Chu, L. Sparkman, E. Toloba, and P. Guhathakurta. *BAAS*, **225**, 248.22, 2015.

194. Flux Calibration and Spectral Typing of the SPLASH Sample. C. Chang, N. Vemuri, K. Hamren, and P. Guhathakurta. *BAAS*, **225**, 250.20, 2015.

195. The Kinematics of Dwarf Carbon Stars. K.A. Plant, B.H. Margon, P. Guhathakurta, and C.M. Rockosi. *BAAS*, **225**, 342.04, 2015.

196. Uncovering the Detailed Structure and Dynamics of Andromeda's Complex Stellar Disk. C. Dorman, P. Guhathakurta, A. Seth, J. Dalcanton, L. Widrow, the SPLASH team, and the PHAT team. *BAAS*, **225**, 429.01, 2015.

197. The Dearth of Lithium-Rich Red Giants in Globular Clusters. A.J. Zhang, E.N. Kirby, and P. Guhathakurta. *BAAS*, **225**, 449.08, 2015.

198. A New Coadded Spectroscopy Technique: Kinematics of NGC 4449's Tidal Stream. P. Guhathakurta, E. Toloba, A.J. Romanowsky, and J.P. Brodie. *BAAS*, **227**, 118.08, 2016.

199. HALO7D: Disentangling the Milky Way Accretion History with Observations in 7 Dimensions. E.C. Cunningham, A. Deason, P. Guhathakurta, C.M. Rockosi, R.P. van der Marel, and S.T. Sohn. *BAAS*, **227**, 326.03, 2016.

200. Extreme Runaway Dwarf Carbon Stars. K.A. Plant, B.H. Margon, P. Guhathakurta, G.P. Laughlin, and J.A. Munn. *BAAS*, **227**, 341.15, 2016.

201. Studying the Structure and Dynamics of the Subcomponents of the Milky Way. M. Wang, A. Mukherjee, J. Lin, P. Guhathakurta, M.A. Fardal, S.T. Sohn, E. Cunningham, A.J. Deason, E. Toloba, S. Keoliya, R.P. van der Marel, and C.M. Rockosi. *BAAS*, **227**, 342.21, 2016.

202. Studying the Structure and Dynamics of the Subcomponents of the Andromeda Galaxy. J. Lin, A. Mukherjee, M. Wang, P. Guhathakurta, M.A. Fardal, S.T. Sohn, E. Cunningham, A.J. Deason, E. Toloba, S. Keoliya, R.P. van der Marel, and C.M. Rockosi. *BAAS*, **227**, 342.22, 2016.

203. Discovery of Remote Globular Cluster Satellites of M87. L. Sparkman, R. Guo, E. Toloba, P. Guhathakurta, E.W. Peng, L. Ferrarese, and P. Côté. *BAAS*, **227**, 342.23, 2016.

204. The Frequency of Lithium-Rich Giants in Globular Clusters. E.N. Kirby, P. Guhathakurta, A.J. Zhang, J. Hong, M. Guo, R. Guo, J.G. Cohen, and K.M. Cunha. *BAAS*, **227**, 404.06, 2016.

205. M31AGES: Studying the Intermediate-aged Populations in the Satellites, Smooth Halo, and Substructure of Andromeda. K. Hamren, R. Beaton, P. Guhathakurta, S.R. Majewski, and the M31AGES Survey Team. *BAAS*, **227**, 441.04, 2016.

206. Studying the Nature of Runaway Stars Using Andromeda's Massive Stellar Population. J. Bulkley, A. Seth, C. Johnson, J. Dalcanton, R. Guhathakurta, C. Dorman, K. Hamren, N. Caldwell, and B. Williams. *APS Meeting Abstracts*, #S11.003, 2016.

207. Keck Spectroscopy of NGVS Sources: Milky Way Halo Star Kinematics. H. Zhang, P. Guhathakurta, E.W. Peng, E. Toloba, and the Next Generation Virgo Cluster Survey (NGVS) Collaboration. *BAAS*, **229**, 142.19, 2017.

208. Kinematics of Hα Emitting Stars in Andromeda. M. Ilango, A. Ilango, G. Damon, L. Prichard, P. Guhathakurta, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **229**, 154.02, 2017.

209. A Mysterious Population of Stars with Weak CN Absorption in the Disk of M31. A. Kamath, A. Sales, A. Sarukkai, P. Guhathakurta, J. Hays, P. Rosenfield, the SPLASH collaboration, and the PHAT collaboration. *BAAS*, **229**, 154.03, 2017.

210. Using a Weak CN Spectral Feature as a Marker for Massive AGB Stars in the Andromeda Galaxy. P. Guhathakurta, A. Kamath, A. Sales, A. Sarukkai, J. Hays, the PHAT collaboration, and the SPLASH collaboration. *BAAS*, **229**, 232.06, 2017.

211. Modeling the Internal Kinematics (Rotation and Dispersion) of Distant Galaxies ($z \sim 1.0$) Using Multi-PA Keck DEIMOS Slit Spectra. C. Miao, J. Chen, J. Torres Hernandez, P. Guhathakurta, and H. Jang. *BAAS*, **229**, 347.23, 2017.

212. Study of Remote Globular Cluster Satellites of M87. A. Sahai, A. Shao, E. Toloba, P. Guhathakurta, E. Toloba, E.W. Peng, and H. Zhang. *BAAS*, **229**, 347.50, 2017.

213. The Masses and Stellar Content of Nuclei in Early-Type Galaxies from Multi-Band Photometry and Spectroscopy. C. Spengler, P. Côté, J. Roediger, L. Ferrarese, R. Sánchez-Janssen, E. Toloba, Y. Liu, P. Guhathakurta, J.-C. Cuillandre, S. Gwyn, A. Zirm, R. Muñoz, T. Puzia, A. Lançon, E. Peng, S. Mei, and M. Powalka. *BAAS*, **231**, 127.05D, 2018.

214. Resolving the Extended Stellar Halos of Nearby Galaxies: The Wide-Field PISCeS Survey. D. Crnojevic, D. Sand, K. Spekkens, N. Caldwell, P. Guhathakurta, B. McLeod, A. Seth, J.D. Simon, J. Strader, and E. Toloba. *BAAS*, **231**, 149.36, 2018.

215. WFIRST: Simulating and Analyzing Wide Field, High-Resolution Images of Nearby Galaxies. R. Khan, B.F. Williams, J. Dalcanton, and the WFIRST Infrared Nearby Galaxies Survey (WINGS) team. *BAAS*, **231**, 150.40, 2018.

216. Spatial Substructure in the M87 Globular Cluster System. Y. Feng, Y. Zhang, P. Guhathakurta, E. Peng, and S. Lim. *BAAS*, **231**, 252.15, 2018.

217. Comparison of Intracluster and M87 Halo Orphan Globular Clusters. T.K. Louie, J.Z. Tuan, A. Martellini, P. Guhathakurta, E. Toloba, E. Peng, A. Longobardi, and S. Lim. *BAAS*, **231**, 258.07, 2018.

218. Dynamics, Chemical Abundances, and Ages of Globular Clusters in the Virgo Cluster of Galaxies. P. Guhathakurta and the NGVS Collaboration. *BAAS*, **231**, 306.02, 2018.

219. A Study of Galaxies and Quasars in the Background of the Andromeda Galaxy. A. Dhara, K. McConnell, P. Guhathakurta, N. Roy, and J. Waite. *BAAS*, **231**, 351.11, 2018.

220. WFIRST: Astrometry with the Wide-Field Imager. A. Bellini and the WFIRST Astrometry Working Group. *BAAS*, **231**, 361.10, 2018.

221. Kinematic, Photometric, and Spectroscopic Properties of Faint White Dwarf Stars Discovered in the HALO7D Survey of the Milky Way Galaxy. M. Harris, E. Cunningham, P. Guhathakurta, I. Cheshire, and N. Gupta. *BAAS*, **231**, 453.02, 2018.

222. Keck DEIMOS Spectroscopy of Compact Stellar Systems in the Next Generation Virgo Cluster Survey. K.B. Mohamad Nizam, E. Toloba, P. Guhathakurta, E.W. Peng, P. Côté, and L. Ferrarese. *BAAS*, **233**, 173.06, 2019.

223. Galaxy Kinematics at z ~ 1 from the Keck HALO7D Spectroscopic Survey. J. Lonergan, G. Barro, E. Toloba, D. Koo, S. Faber, P. Guhathakurta, E. Cunningham, and Y. Guo. *BAAS*, **233**, 173.07, 2019.

224. HALO7D: Disentangling the Milky Way Accretion History with Observations in 7 Dimensions. E. Cunningham, A. Deason, P. Guhathakurta, C. Rockosi, J. Anderson, S.T. Sohn, E. Kirby, and R. van der Marel. *BAAS*, **233**, 211.02, 2019.

225. Using Deep Learning Techniques to Classify Stars and Galaxies in Keck DEIMOS Spectra. A. Sahai, V. Sahai, P. Guhathakurta, and E. Cunningham. *BAAS*, **233**, 245.13, 2019.

226. The Globular Cluster Systems of Virgo Cluster Dwarf Galaxies. G. Wang, R. Sankar, V. Liu, E.W. Peng, Y. Ko, A. Longobardi, S. Lim, and P. Guhathakurta. *BAAS*, **233**, 266.02, 2019.

227. HALO7D: Separating Sun-like Stars in the Milky Way Halo from Foreground White Dwarfs and Interesting Background Contaminants. A. Lu, T. Jain, J. Tuan, P. Guhathakurta, E. Cunningham, and M. Harris. *BAAS*, **233**, 267.05, 2019.

228. A Keck DEIMOS Spectroscopic Survey of M33. P. Guhathakurta, A.C. Quirk, K.M. Gilbert, J. Wojno, and E. Kirby. *BAAS*, **233**, 316.07, 2019.

229. Identifying Photometrically Variable Stars in the Andromeda Galaxy. G. Chawla, R. Maheshwari, B. McColm, R. Dudschus, M. Soraisam, and P. Guhathakurta. *BAAS*, **233**, 360.08, 2019.

230. Surprises from Dwarf Carbon Stars: A Dispersion in Abundances and Binary Periods. B. Margon, S. Lucatello, M. Bolte, and P. Guhathakurta. *BAAS*, **233**, 364.06, 2019.

231. Automated Classification of a Mysterious Population of Weak CN Stars in the Andromeda Galaxy. A. Masegian, A. Maheshwari, P. Guhathakurta, and R. Raikar. *BAAS*, **233**, 371.01, 2019.

232. Correcting Offsets in Stellar Spectra. A.S. Krishnamoorthi, P. Bhoj, I. Cheshire, P. Guhathakurta, K. McKinnon, and E. Cunningham. *BAAS*, **233**, 381.04, 2019.

233. The Synergy Between HST and Keck in the Study of Stellar Dynamics in the Local Group. P. Guhathakurta. *BAAS*, **233**, 443.08, 2019.

234. Globular Clusters in the Hubble Frontier Field Cluster Abell 2744 at z ~ 0.31. J.M.C. Barber, E. Toloba, G. Barro, J. Blakeslee, P. Guhathakurta, and E.W. Peng. *BAAS*, **233**, 451.01, 2019.

235. HST Imaging of Globular Cluster System of the Virgo Cluster Ultra-Diffuse Galaxy VLSB-B. Y. Zhang, E.W. Peng, P. Guhathakurta, E. Toloba, S. Lim, P. Côté, P.R. Durrell, L. Sales, and C. Mihos. *BAAS*, **233**, 468.07, 2019.

236. Machine-Based Spectral Classification of Weak CN & Carbon Stars in M31. S. Kotha, P. Guhathakurta, R. Raikar, and A. Bhattacharya. *BAAS*, **235**, 110.10, 2020.

237. Alpha and Iron Element Abundances in the Outer Disk, Giant Stellar Stream, and Inner Halo of Andromeda. I. Escala, E. Kirby, K. Gilbert, J. Wojno, E. Cunningham, S. and P. Guhathakurta. *BAAS*, **235**, 124.04, 2020.

238. Asymmetric Drift in M31 and Illustris M31 Analogs. A. Quirk, E. Patel, and P. Guhathakurta. *BAAS*, **235**, 145.06, 2020.

239. Project AMIGA: Identifying the Circumgalactic Gas Associated with Andromeda and its Dwarf Satellites. S. Berek, N. Lehner, J. Howk, B. Wakker, E. Jenkins, J. Prochaska, K. Barger, R. Bordoloi, T. Brown, D. French, P. Guhathakurta, F. Lockman, J. O'Meara, M. Peeples, D. Pisano, and J. Ribaudo. *BAAS*, **235**, 205.02, 2020.

240. An Automated Pipeline for Globular Cluster Detection in Virgo Cluster Dwarf Galaxies. J. Du, E. Zhou, B. Wences, Y. Ko, E.W. Peng, and P. Guhathakurta. *BAAS*, **235**, 285.01, 2020.

241. Improved Proper Motion Measurements of M31. T. Sohn, M. Fardal, G. Besla, M. Boylan-Kolchin, R. van der Marel, P. Guhathakurta, I. Platais, E. Patel, E. Tollerud, E. Cunningham, K. Gilbert, and A. del Pino-Molina. *BAAS*, **235**, 324.02, 2020.

242. Looking for Intermediate-Mass Black Holes in the Globular Clusters of the Virgo Cluster. A. Padiyar, W. Huang, V. Tang, P. Guhathakurta, and P. Madau. *BAAS*, **235**, 369.04, 2020.

243. Identifying Photometrically Variable Stars in the Andromeda Galaxy. R. Shrivastava, J. Tuan, G. Chawla, K. Long, A. Choudhary, S. Mukherjee, and P. Guhathakurta. *BAAS*, **235**, 380.01, 2020.

244. Project AMIGA: Extent and Distribution of the Circumgalactic Medium of Andromeda. N. Lehner, S. Berek, J. Howk, B. Wakker, E. Jenkins, J. Prochaska, K. Barger, R. Bordoloi, T. Brown, D. French, P. Guhathakurta, F. Lockman, J. O'Meara, M. Peeples, D. Pisano, and J. Ribaudo. *BAAS*, **235**, 430.04, 2020.

PRESS RELEASES AND MEDIA COVERAGE

1. Participated in PBS Television Series (KCET, Los Angeles, CA); *The Astronomers*. "Episode: Where is the Rest of the Universe?" September 1990.

2. American Astronomical Society press release "The Many Faces of IRAS 100 micron Cirrus Clouds," by P. Guhathakurta, R.M. Cutri, J.H. van Gorkom, and G.R. Knapp; January 1991.

3. American Astronomical Society press release "A CCD Mosaic Image of M31," by P. Guhathakurta, S. Raychaudhury, and A. Berlind; June 1994.

3. Space Telescope Science Institute/UCSC press release "*Hubble* Peers Deep into the Heart of the Densest Known Star Cluster", by P. Guhathakurta, B. Yanny, D.P. Schneider, and J.N. Bahcall; December 1995.

4. Participated in PBS Television Series (KTEH, San Jose, CA); "Real Science." Segment: Astronomy Research with the *Hubble Space Telescope*, September 1996.

5. UCSC press release "UC Santa Cruz Astronomers Describe Two Newly Discovered Galaxies, Companions of the Nearby Andromeda Galaxy," by E.K. Grebel and P. Guhathakurta; January 1999.

6. American Astronomical Society press release "*HST* Snapshot Survey of Nearby Dwarf Galaxy Candidates," by P. Seitzer, E. K. Grebel, A. E. Dolphin, D. Geisler, P. Guhathakurta, P. W. Hodge, I. D. Karachentsev, V.E. Karachentseva, and A. Sarajedini; January 2000.

7. UCSC press release "Is There an Extreme Warp in the Stellar Disk of the Andromeda Galaxy?" by P. Guhathakurta, P. Choi, and D.B. Reitzel; January 2001.

8. Participated in PBS Television Series (KQED, San Francisco, CA); "Digital West." Segment: State of the Skies, January 2001.

9. Interviewed for British Broadcasting Corporation (BBC) Science Radio (San Francisco, CA); The DEEP Survey and DEIMOS Spectrograph, March 2001.

10. Space Telescope Science Institute press release "*Hubble* Discovers Black Holes in Unexpected Places," by R. van der Marel, J. Gerssen, P. Guhathakurta, R. Peterson, C. Pryor, M. Rich, K. Gebhardt, and L. Ho; September 2002.

11. UCSC press release "Astronomers Detect a Faint Debris Trail in the Andromeda Galaxy, More Evidence of Galactic Cannibalism," by P. Guhathakurta and D.B. Reitzel; January 2003.

12. Panelist at Science Writers' Workshop, Space Telescope Science Institute, Baltimore, MD; "The Stellar Halo of the Andromeda Spiral Galaxy" and "The Formation and Evolution of Dwarf Elliptical Galaxies," May 2003.

13. UCSC and UC Berkeley press release "Astronomers Reveal the First Detailed Maps of Galaxy Distribution in the Early Universe," by DEEP2 Team; July 2003.

14. Interviewed for British Broadcasting Corporation (BBC) Radio documentary on galaxy formation, UCSC; September 2003.

15. Participated in documentary on US science education by independent film maker Robert Enteen, Woods Hole, MA, July 2004.

16. Participated in documentary on the Sun and its effect on humans by independent film maker Peter Sorcher, Santa Cruz, CA; September 2004.

17. UCSC press release "A Simple Survey Yields a Cosmic Conundrum," July 2006.

18. Interviewed about Mercury transit for the Banana Slug News (UCSC TV station)/interviewer: Victoria Wilder-Eisenberg, November 2006.

19. Interviewed for short documentary entitled "Stargazers" for UCSC student film/interviewer: Hiroki Ono, November 2006.

20. UCSC press release "Astronomers Discover an Enormous Halo of Red Giant Stars around Andromeda"; accompanying press conference at the Seattle AAS meeting, January 2007.

21. University of Massachusetts press release "Evidence of Ancient Galactic Collision Found, Confirmed by UMass Amherst Astronomer's Model"; accompanying press conference at the Seattle AAS meeting, January 2007.

22. AEGIS special issue (UCB) and NASA/STScI video of *HST*/ACS poster of EGS, March 2007.

23. Quoted in a *San Francisco Chronicle* article about the impending collision between our Milky Way and the Andromeda galaxies, May 2007.

24. Quoted in a *Discover* magazine article about the Local Group, where our group's discovery of M31's stellar halo is cited, August 2007.

25. Nature Research Highlights writeup of Gilbert et al. (2007) article on the discovery of M31's SE shelf and its relation to the giant southern stream, October 2007.

26. Interviewed for National Geographic News article about the Majewski et al. (2007) article about the discovery of the dynamical rogue Andromeda dwarf satellite And XIV, November 2007.

27. Discovery Channel program featuring Fardal et al. (2008) article on the detailed forensic reconstruction of M31's giant southern stream, July 2008.

28. Astronomy magazine article on galaxy cannibalism featuring the SPLASH group's work on the giant southern stream in Andromeda; on-line blog on this topic hosted by associate editor Dan Pendick; January–April 2009.

29. Gave radio interview about how astronomers measure distances to stars for Science Update (scienceupdate.com) of the AAAS; program: Why is it?; interviewer: Corrina Wu, March 2009.

30. Interviewed by Yudhijit Bhattacharjee for two Science magazine articles, one about extreme adaptive optics and direct searches for exoplanets and the other about the TMT/GMT rivalry, May 2009.

31. Guest at the Richard Dawkins Foundation for Reason and Science fundraising event, Rosewood Sandhill Resort, Menlo Park, October 2009.

32. UCSC News & Events story and Harker School release on Harker students earning Intel Science Talent Search semi-finalist/finalist spots, January 2010.

33. Expert commentator on AAS press release on "Astronomers Map the Shape of Galactic Dark Matter" by David Law, Steve Majewski, and Kathryn Johnston, Washington, D.C., January 2010.

34. AAS press conference on "Galaxies Stirred, But Not Shaken" based paper on "Tidal Streams in Andromeda's Halo" and associated UCSC/NSF/Keck Observatory/Subaru press releases, Washington, D.C., January 2010.

35. UCSC News & Events article on "Cannibal Galaxies and Chemical Abundances: High School Physical Science Interns Explore the Universe," by Dan White; Santa Cruz, CA, July 2010.

36. Castilleja School News Alert "Summer of Science" and video, by Katherine Kirsch; Palo Alto, CA, July 2010.

37. Harker News article: "A New California Record: Seven Intel Semifinalists"; San Jose, CA, January 2011.

38. UCSC News & Events article on "UCSC Faculty Mentor Intel Science Contest Finalists," by Tim Stephens; Santa Cruz, CA, February 2011.

39. Quoted in City on a Hill Press article about Illingworth & Bouwens' discovery of $z \sim 10$ galaxy candidate; interviewed by Kara Foran; Santa Cruz, CA, February 2011.

40. Interviewed by Ellen Morgan, Australian exchange student in newswriting journalism at UCSC, about Illingworth & Bouwens' discovery of z ~ 10 galaxy candidate; Santa Cruz, CA, February 2011.

41. Science magazine article entitled "Galaxy Evolution: Milky Way Researchers' Home Away from Home," by Yudhijit Bhattacharjee prominently featured the SPLASH group's work, July 1 2011 issue.

42. UCSC University News article entitled "Milky Way Destined for Head-on Collision with Andromeda Galaxy," by Tim Stephens; Santa Cruz, CA, May 2012; accompanying NASA and STScI press releases and NASA press conference.

43. Presentation about the Thirty-Meter Telescope at "Science/Engineering Boot Camp for Journalists on Computational Astronomy: from Planets to Cosmos"; Santa Cruz, CA, June 2012.

44. NASA/STScI press release "Hubble Unmasks Ghost Galaxies"; Baltimore, MD, July 2012.

45. Quoted extensively in Sky & Telescope magazine article entitled "Cosmic Web Weeds Dwarf Galaxies," by Camille Carlisle, about recent article on the arXiv on ram-pressure by the cosmic web and the missing satellites problem, November 2012.

46. San Jose Mercury News article "Galactic surprise: New find overturns theories how our galaxy evolved" about paper led by Susan Kassin on the luminosity-linewidth of distant galaxies; January 2013.

47. Interviewed by Tia Ghose of LiveScience about AAS poster led by my SIP students Zareen Choudhury and Caroline Debs on runaway massive hot young stars in M31; January 2013.

48. NASA/STScI/UCSC press release "Stellar Motions in Outer Halo Shed New Light on Milky Way Evolution" about work with A. Deason and R.P. van der Marel; February 2013.

49. UCSC press release "UCSC internships for high school students yield success in science contests", October 2013.

50. Interviewed (along with Josée Band) by Dana Sundblad for feature on "Getting Girls to Thrive in STEM" in the Castilleja School's Full Circle publication, December 2013.

51. Participated in "JWST Hangout on Air" at the 223rd AAS meeting in Washington DC, a live-streamed discussion with Tony Darnell (Social Media Manager at STScI) and Alberto Conti (Northrop Grumman) about galaxy evolution studies including research by high school students, January 2014.

52. Interviewed by Kiet Do, reporter for Channel 5 KPIX (CBS) San Francisco, for a story about the conversion of San Jose's streetlights from low-pressure sodium lamps to white light LED lamps and the impact on Lick Observatory, February 2014.

53. International Innovation (Research Media Ltd.) reports “High School Scientists” and “Galactic Exploration” about the UCSC Science Internship Program and the SPLASH collaboration’s research highlights, respectively, July 2014.

54. Palo Alto Weekly News story “Stoking a passion for science” about the UCSC Science Internship Program (reporter: Veronica Weber), July 2014.

55. Imagine magazine (publication of Johns Hopkins University Center for Talented Youth) story “Star Studies” about the UCSC Science Internship Program written by SIP alumna Zareen Choudhury, September 2014.

56. Telegraph (Kolkata, India) article “Sky’s the limit for these girls” about three high school students’ participation in the 2014 Pacific Astronomy and Engineering Summit in Hilo, HI mentored by E. Cunningham and me (reporter: Jhinuk Mazumdar), December 2014.

57. UCSC press release (joint with WMKO) “Study of Andromeda’s stellar disk indicates more violent history than Milky Way” about work with C. Dorman, January 2015.

58. Presentation at press conference about Lick Observatory and LED streelighting, Miner Park, San Jose, CA (with Mayor Sam Liccardo, Councilmember Ash Kalra, et al.; covered by KTVU TV, KGO radio, Chinese newspapers TVB USA and Sing Tao), February 2015.

59. UCSC press release “UC Santa Cruz professor aims to expand science internships for high school students” about a collaboration with Google to expand and diversify the Science Internship Program on a national/global scale, February 2015.

60. Talk at TEDx Harker School conference “The Importance of Engaging Youth in Research: An Astronomer’s Perspective”, October 2015.

61. Mentioned in article “Sky above, earth below and everything in between” by Devi Kar in The Telegraph (Kolkata, India), February 2016.

62. Advisor on television show about a cosmic event (contact: Joel Ehninger), November 2016.

63. Advisor on video game “Mass Effect Andromeda” (contact: Jonathan Gordon), November 2016.

64. Interviewed by Rashmi Iyer for an article about space exploration in the Wing Post (Harker School newspaper, San Jose, CA), January 2017.

65. Interviewed by Kim-Vy Tran for “Inside a Scientist’s Suitcase,” a video series for middle school girls, January 2017.

66. Interviewed by Jim Lattis for American Astronomical Society Oral History project, January 2017.

67. UCSC press release “Science Internship Program creates opportunities for high school students” about diversification of the Science Internship Program, January 2017.

68. Narrative from "Our Place in the Cosmos" lecture incorporated into a musical piece by Simon Horsefield entitled "The Evolving 9th Hour: A Winchester Rose," London, U.K., July 2017.

69. Interviewed by Priya Gurjar for a blog for YouResearch, "UCSC Science Internship Program and Global SPHERE Network," September 2017.

70. Interviewed by Jin Tuan for an article in the Harker School's Aquila magazine about the neutron star merger and kilonova, October 2017.

71. Interviewed by Mark Mancini for an article about galaxy morphology in How Stuff Works, November 2017.

72. UCSC press release "Global SPHERE Network promotes research opportunities for high school students," November 2017.

73. Science consultant for the CBS television drama "Scorpion", episode #417 "Dumb-ster Fire," December 2017–February 2018.

74. Interviewed by Emily Cunningham for a STEMCast (PodCast) for STEM-Away (coordinator: Debaleena Das), January 2018.

75. Mentioned in article "Global Network Aims at STEM Engagement" by Claudia Civinini in The PIE News, January 2018.

76. Interviewed by David Leckrone for his upcoming book about Life with Hubble: The Trials and Triumphs of the World's Most Popular Telescope (anticipated publication date: 2020 or 2021), February 2018.

77. Featured in the newsletter of STEM Mentors Silicon Valley, a US2020 city network, February 2018.

78. Talk at TEDx Youth conference at The Nueva School "The Future of STEM Education, Astrophysics Research, and the Milky Way Galaxy," March 2018.

79. Modesto Area Partners in Science (MAPS) presentation mentioned in article in the Modesto Bee, April 2018.

80. Quoted in article in Sky & Telescope magazine by Elizabeth Howell in response to Nature Astronomy Letters article about M31's proposed major merger with the progenitor of M32, July 2018.

81. Interviewed by Saloni Shah about the SIP program for an article in the Winged Post (print) and Harker Aquila (online), September 2018.

82. Quoted in article in Sky & Telescope magazine by Camille Carlisle in response to Nature Astronomy Letters article about a possible merger that led to the formation of the Milky Way's stellar halo and thick disk, October 2018.

83. UCSC news post "UCSC interns among top high school presenters at Sigma Xi Student Research Conference," October 2018.

84. Brief interview with Crystal Tinch about reasons for attending their annual meeting – tweeted by the American Astronomical Society, January 2019.

85. Quoted in Gizmodo (science/technology website) by Daniel Kolitz in response to question about the loudest sound in the Universe, January 2019.

86. Lecture on "Galaxies: Dark Matter, Cannibalism, and the Periodic Table of Elements" as part of the All Space Considered program at Griffith Observatory, Los Angeles, CA (live and online audiences), February 2019.

87. Interviewed by Times Now and India Today, two major Indian news media outlets, about the lunar landing of India's Chandrayaan 2 satellite, August/September 2019.

88. Astrophysics consultant for "The Square Root of a Sonnet (The Strange History of Black Holes)," a play about the two famous astrophysicists Chandrasekhar and Eddington, directed by Ranjita Chakravarty (Bay Area Drama Company), January–June 2020.

UNIVERSITY SERVICE

Astronomy and Astrophysics Department and UCO Administrative Appointments

1994–1995	Coordinator, FLASH seminar series, Lick Observatory
1994–	Member, Ph.D. Qualifying/Thesis Defense Examination Committee for two dozen UCSC A&A Department students
1995–1996	Member, Preliminary Examination Committee
1996	Faculty Representative, NSF/AAS Western Regional workshop on "The Future of Astronomy Graduate Programs," Tuscon, Arizona, November
1997	Chair, Graduate Career Opportunities Committee
1997–1999, 2003–2008, 2016–2018	Member, Graduate Student Advising Committee (chair, 2007–2008)
1998–2002	Member, Preliminary Examination Committee
1998–2009	Assistant to Burton Jones, Lick Observatory's Liaison with the San Jose Streetlighting Division
1999	Representative, Preview Day for Graduate School Applicants
2001	Member, Colloquium Committee (Fall)
2001	Chair, Preliminary Examination Committee
2000–2001	Member, UCO/Lick Faculty Recruitment Committee
2003–2008	Associate Department Chair
2003–2014	Graduate Representative
2003–2014, and 2016–present	Chair (2004–2012)/co-chair (2013–2014, 2016–2018), Graduate Admissions Committee; initiated Skype video interviews in Spring 2009
2005–2012	Member, Development Committee (A&A Department and UCO/Lick Observatory)
2010–	Lick Observatory Liaison with the San Jose Streetlighting Division

2012–2014 UCO Development Coordinator
2012–2014 Chair, Keck UC Extragalactic Time Allocation Committee
2014, 2016–2019
Scheduler, Keck UC telescope time
2016 Graduate Curriculum Committee
2018 Keck UC Nearby Universe Time Allocation Committee
2019– Department Chair

UC Santa Cruz Administrative Appointments

1999 Member, Ad-Hoc Committee for Promotion to Tenure
2001–2002 Member, Committee on Teaching
2004 Member, Committee on Academic Personnel, Ad-Hoc Committee for Appointment
2005 Chair, Ad-Hoc Committee for Promotion to Tenure
2006 Graduate Admissions Review Portal (GARP) Steering Committee
2007 Chair, Ad-Hoc Committee for Promotion to Tenure
2007 Member, Academic Information Systems (AIS)/MyUCSC working group, Spring
2007–2008 Subcommittee Chair, Committee on Academic Freedom, to deal with a specific complaint to Senate Executive Committee
2007–2010 Member, Committee on Academic Freedom
2011–15, 2017–present
Member, COSMOS Faculty Advisory Committee
2012– Member, Independent Substantive Review (Conflict of Interest) Committee
2013–2014 Member, Committee on Academic Freedom
2013–present
UCSC representative to AURA (Association of Universities for Research in Astronomy)

Other Activities

1995–1997 Co-PI, Echelle Spectrograph and Imager (ESI) on Keck Telescope
1998 Helped prepare for NSF review panel's site visit for CfAO
1999–2000 CfAO building users' group
1999–2000 Videoconferencing lead, CfAO (with Sandra Faber)
2000 Presentation for Ed Frank, potential donor (with Joseph Miller and Burton Jones)
2000–2001 California Extremely Large Telescope (CELT) Instrument Working Group
2001 Presentation for Ben Lutch, Graham Spencer and other Excite.com co-founders at Mount Hamilton (with Remington Stone)
2001 Presentation and DEIMOS tour for Ben Lutch and Graham Spencer (Excite.com co-founders) at UCSC (with Joseph Miller, Sandra Faber, and Remington Stone)
2001 Facilitated ESI multi-slit echelle mode (with Judith Cohen and Robert Goodrich)
2001 CfAO Astronomical Science summary presentation at year 2 NSF site visit
2001 DEIMOS tour and presentation for new UC Regent: George Marcus
2001–2002 Videoconferencing for the A&A Department (with Sandra Faber)
2002 Participated in UC Regents visit
2002–2004 Supervision of Lick Observatory web page design (with Robin Horn née Witmore)
2003 Participated in Carmel fund-raising event hosted by Trustee Marion Cope

2003	Facilitated use of multi-slit spectroscopy through "megamasks" on DEIMOS using narrow-band Ca triplet filter
2004	Supervised computer arrangements for new first-year graduate students
2004–2005	Keck Observatory Science Steering Committee (SSC)
2005	Courted potential donors from Cisco, Rick Sanford and Kim Gibbons, at Lick Observatory, Mt Hamilton, CA
2005	Presentation for The Indus Entrepreneurs (TiE) group at fund-raising event with Chancellor Denice Denton and three other UCSC faculty members at UCSC
2005	Judge, Annual Graduate Student Research Symposium at UCSC
2005	Campus representative, meeting with Western Association of Schools and Colleges (WASC) accreditation team on the effectiveness of graduate programs
2005	Principal scientist and science team member for the TMT Deployable Annular Imaging Spectrograph for the Investigation of the Evolution of Structure (DAISIES) instrument led by the University of Wisconsin (PI: Andrew Sheinis) and UCSC. Instrument not selected for TMT
2005	Science team member for the Thirty-Meter Telescope (TMT) Wide-Field Optical Spectrograph (WFOS) instrument led by Canada: Roberto Abraham (University of Toronto) and Patrick Coté (Herzberg Institute of Astrophysics, Victoria)
2005–2009	Co-Chair (for UC), Thirty-Meter Telescope Science Advisory Council
2008–	Member, TMT/MOBIE science team
2009	Main lecture at "A New View of the Universe" reception hosted by Keck Observatory, Atherton, CA; 30 donors/prospects; "Our Place in the Cosmos: The Andromeda Galaxy and Galaxy Cannibalism"
2009	Main lecture at "An Evening Under the Stars" event hosted by Keck Observatory, Kohala, HI; 200 donors/prospects; "Our Place in the Cosmos: The Andromeda Galaxy and Galaxy Cannibalism"
2009	Two lectures as part of Keck Observatory Advancement's "Evenings with Astronomers" series, Hawaii; "M31—The Galaxy Next Door"
2010	Lecture at Astronomy Salon, Saratoga, CA; 30 donors/prospects; "Galaxies and our Place in the Cosmos"
2010	Lecture (with Greg Laughlin) for Achievement Rewards for College Scientists Foundation annual donors meeting, University of California San Francisco Mission-Bay, San Francisco, CA; "Our Place in the Cosmos"
2010	Hosted Kabir Chattopadhyay and family (neighbors of Anu Luther) at UCSC (with Enrico Ramirez-Ruíz)—follow-up of Astronomy Salon
2010	Fielded astronomy questions (with E. Ramirez-Ruíz and R. Bernstein) at a salon-style dinner hosted by Rakesh and Dipti Mathur at their home, Saratoga, CA
2011	Facilitated the dissertation project of Julie Posselt (U. of Michigan Education Dept Ph.D. student visiting UCSC working on graduate school selection criteria)
2011	Presented new idea about astronomy-friendly LED lighting for future streetlighting at Municipal Solid-state Street Lighting Consortium (with Dale Kane and Nancy Klanton), San Jose, CA
2011	Interviewed by Reynal Guillen (NSF postdoc, UCLA) for his project on students from underrepresented minorities – topics included research mentoring, outreach, graduate admissions, teaching large introductory classes at UCSC, the COSMOS program, design of research projects, and use of large data sets

2011	Gave a talk entitled "Our Place in the Cosmos" to 75–100 students and participated in a panel discussion (with Tyrus Miller and Allison Galloway) at the SACNAS (Society for the Advancement of Hispanics/Chicanos and Native Americans in Science) annual conference, Tech Museum, San Jose, CA
2011	Gave a talk on behalf of Keck Advancement to prospective donor group from Omaha: "Our Place in the Cosmos", Keck HQ, Waimea, HI
2011	Hosted/co-hosted two different summit visits and Keck tours: (1) with Jeff Dean (Google) and his daughter Victoria Dean (UCSC SIP intern, Castilleja student), and (2) with Jim Chang (Stanford surgeon and Castilleja parent), Mauna Kea, HI; Dean made a donation of $10K to W.M. Keck Observatory at the end of his tour
2011	Helped coordinate Lick Observatory's participation in the Bay Area Science Festival (with John Wareham and Graeme Smith) and gave a public lecture: "Astronomy and Cosmology (not to be confused with Astrology, Gastronomy, and Cosmetology)", Mount Hamilton, CA
2011	Gave a Google Tech talk: "Our Place in the Cosmos" – in part to advertise the SIP program, Mountain View, CA; hosts: Jeff Dean and Boris Debic (Google)
2011	Spoke at an astronomy salon hosted by Rakesh and Dipti Mathur at their home, Saratoga, CA – aimed at fundraising for the SIP program and UCSC graduate fellowships in astronomy; talk title: "Mergers and Acquisitions: The Lives and Times of Galaxies"
2011–2013	Member of the UCSC COSMOS committee to restructure the summer program for high school students; committee convened/chaired by Professor Richard Hughey, Vice Provost and Dean of Undergraduate Education
2012–2014	Worked with Gordon Ringold (Director, UCSC's Silicon Valley Initiative), Srini Madala (CEO, Softsol), and Robert Irion (Director, UCSC's Science Writing Program) to try to set up a UCSC/KQED science writing competition and award
2012	Gave a talk entitled "Astronomy & Cosmology (not to be confused with astrology, gastronomy, and cosmetology)" to 12 students from the UC Santa Cruz chapter of SACNAS (Society for the Advancement of Hispanics/Chicanos and Native Americans in Science), UCSC
2012	Spoke to a women's group, residents of Silver Creek Valley Country Club, San Jose, CA; responded to a request made to UCO/Lick Observatory; talk title: "Mergers and Acquisitions: The Lives and Times of Galaxies"
2013	Invited to serve on panel for "Astronomy Live! Tonight" hosted by Timothy Ferris and to speak about "Galaxies: Island Universes?"; reception on the occasion of the W.M. Keck Observatory 20th anniversary celebration, Waimea, HI
2013	Led astronomy workshop for 30 middle school students from Shoreline School in Santa Cruz (assisted by Claire Dorman and Katie Hamren); first annual Middle School Summit at UCSC as part of the Santa Cruz County College Commitment (S4C)/coordinator: Michelle Whittingham, Associate Vice Chancellor of Enrollment Management and Interim Director of Financial Aid and Scholarships
2013	Worked with Dan Zevin (CSE/SSL Berkeley), Joell Hanson (principal), Mark Hanson (technical consultant), and Dave Chisholm (teacher) and others to set up a partnership between Prospect High School, Saratoga, CA and Lick Observatory
2014	Judge, Graduate Research Symposium, UCSC
2014–2015	Collaboration with artist Diana Thater on a Milky Way themed video art installation as part of the "Beta Space" series at the San Jose Museum of Art

2014–2018 Developed a funding structure for the Science Internship Program that currently annually pays out ~$250,000 in graduate student/postdoc/research staff mentor stipends over the summer

2015 Sabbatical visit to Google, Mountain View, CA to work on expansion and diversification of the Science Internship Program and to do a computational project: creating a grid of synthetic stellar spectra to measure the chemical abundances of stars in the Milky Way halo from the HALO7D project (February–October)

2015 Gave a series of three Google Tech talks: "Astrophysics Lecture Series – 1. The Universe of Galaxies; 2. Relativity & Black Holes; 3. The Early Universe" – in part to advertise the SIP program, Mountain View, CA; host: Ira Pramanick (Google)

2016 Hosted two outreach events (public talk, Keck/DEIMOS remote observing) at W.M. Keck Observatory headquarters, Waimea, HI for groups of Hawaii Prep Academy and Parker High School students, Castilleja School girls, NY Academy of Sciences educational professional, teachers, and parents (April & December)

2017 Co-lead (with Michelle Whittingham) on session on "Engaging High School Students in Research: University and High School Collaboration" – International Career and College Counseling (IC3) conference, New Delhi, India

2017 Participated in "Ask an Astronomer" at the Keck Observatory Open House, Waimea, HI

2018– Advisor, Earth Academy, a high school internship/leadership program at UC Berkeley's Space Sciences Lab

2018 Event for W.M. Keck Observatory donors– talk to a small group at Rob and Terry Ryan's home, Kohala, HI

2018 Speaker ("Observing the Night Sky") at "Original Thinkers: Earth Night," an event organized by the Santa Cruz Chapter of the International Dark Sky Association, Santa Cruz, CA

2018 Participated in Astro Day with W.M. Keck Observatory staff, Hilo, HI

2018 Co-lead (with Michelle Whittingham and Reshma Madhusudan) on session on "Engaging High School Students in Research: University and High School Collaboration" – International Career and College Counseling (IC3) conference, New Delhi, India (part of UCSC delegation led by Chancellor George Blumenthal)

2018– Astronomy liaison for Cal-Bridge North, an NSF-funded program to increase the graduation rates of California State University undergraduates and their entry into physics, astronomy, or related PhD programs

2019 UCSC faculty representative at Presidential Forum, International Career and College Counseling (IC3) conference, Mumbai, India/coordinator: Michelle Whittingham

2020 Science advisory team for DEIMOS upgrade, W.M. Keck Observatory

2020 Participated in "Ask an Astronomer" (online) at the Keck Observatory Open House

2020 Member, Scientific Organizing Committee for the 2020 Keck Science Meeting

PROFESSIONAL ACTIVITIES

Consultative or Other Service to Civic, State, or National Governmental Agencies

1990–1995 Referee, National Optical Astronomy Observatories (CTIO) observing proposals

1991–1999	Reviewer, National Science Foundation grant proposals
1995	Reviewer, NASA/*Hubble Space Telescope* Cycle 6 proposals
1998	Reviewer, CalSpace grant proposals
2000	Member, NASA Space Interferometry Mission AO panel
2000–2002	Member, National Optical Astronomy Observatories TAC panel
2001	Reviewer, NASA/*Hubble Space Telescope* Cycle 11 proposals
2001–2002	Member, Hubble Fellowship selection panel
2002	Chair, SPIE Conference AS01–4834 on "Discoveries and Research Prospects from 6- to 10-Meter-Class Telescopes II" (Waikoloa, HI); tasks: putting together program committee, invited review talks, and overall schedule of talks/posters
2002	Referee, Canada-France-Hawaii Telescope observing proposals
2003	Member, Large Synoptic Survey Telescope Stellar Populations panel
2006	Member, review panel for NASA's Astrophysics Data Program; Baltimore, MD, October
2006	Participant in effort to forge closer Indo-US astronomy ties (led by Shri Kulkarni at Caltech)
2007	Panelist, *Hubble Space Telescope* Cycle 16 proposals, Baltimore, MD; March
2007	Member, Extragalactic science panel, *Spitzer Space Telescope* Cycle 4 proposals, Pasadena, CA
2007–2008	Member, MAGIQ preliminary and detailed design review committee (Keck Observatory acquisition and guiding system), Waimea, HI, March–August
2007	Member, Scientific Organizing Committee, TMT Science Workshop, July 2007
2007	Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC)
2009–2010	Member, Electromagnetic Observations from Space (EOS) Program Panel of the National Research Council's Astro2010 Astronomy and Astrophysics Decadal Survey
2010	Member, *Hubble Space Telescope* Cycle 18 proposal review panel, Space Telescope Science Institute, Baltimore, MD
2010–2011	Referee, Subaru Open Use proposals for 2010B, 2011A, and 2011B semester for proposals related to Nearby Galaxies, Local Group, and Milky Way
2011	Member, Hubble Fellowship selection committee, Space Telescope Science Institute, Baltimore, MD
2011	Reviewer, National Science Foundation grant proposals in the panel "Populations, Abundances, Surveys and Structure", NSF headquarters, Washington DC
2011–2013	Member, first international time allocation committee for China's new Telescope Access Program, which gives Chinese astronomers access to CFHT, Palomar 5-m, MMT, and Magellan
2012	Chair, Hubble Fellowship selection committee, Space Telescope Science Institute, Baltimore, MD
2012	Reviewer, National Science Foundation grant proposals in the panel "Populations, Abundances, Surveys and Structure", NSF headquarters, Washington DC
2012	Reviewer, National Science Foundation grant proposals in the panel "High Redshift Galaxies", NSF headquarters, Washington DC
2013	Member, *Hubble Space Telescope* Cycle 21 proposal review panel on galaxies, Space Telescope Science Institute, Baltimore, MD
2015	Reviewer, National Science Foundation grant proposals, NSF headquarters, Washington DC

External Membership on Examination Committees

1993 John Hibbard, Ph.D. thesis defense (Columbia U)
1999 Ariyeh Maller, Ph.D. thesis defense (UCSC/Physics)
2004 Jonathan Geehan, MS thesis defense (U Victoria)
2008 Janet Colucci, Ph.D. topic defense (U Michigan)
2009 Erik Tollerud, Ph.D. topic defense (UC Irvine)
2009 Peter Manning, Ph.D. topic defense (UCSC–SCIPP/Physics)
2010 Janet Colucci, Ph.D. thesis defense (U Michigan)
2011 Chengze Liu, final postdoc exam (KIAA, Beijing, China)
2017 Gina Duggan, Ph.D. topic defense (Caltech)
2017 Alex McDaniel, Ph.D. topic defense (UCSC/Physics)
2017 Max Baugh, Ph.D. topic defense (UCSC/Physics)
2018 Jonathan Sick, Ph.D. thesis defense (Queens U)
2018 Ivanna Escala, Ph.D. topic defense (Caltech)

Invited/Keynote Talks at Conferences

1990 STScI workshop, "Evolution of Galaxies at High Redshift," Baltimore, MD; Redshift Constraints from Deep UBRI Imaging, April.
1991 XXVIth Rencontre de Moriond, "Early Observable Universe from Diffuse Backgrounds," Les Arcs, France; Redshift Constraints and Clustering of Faint Galaxies, March.
1992 STScI Symposium, "Blue Stragglers," Baltimore, MD; *HST* Study of Blue Stragglers in 47 Tuc and M15, July.
1993 First Symposium on "Infrared Cirrus and Diffuse Interstellar Clouds," Tucson, AZ; Optical Studies of High-Latitude Dust, May.
1993 Sixth Asian-Pacific Regional Meeting of the IAU, Pune, India; Faint Blue Galaxies and Gravitational Lensing by Galaxy Clusters, August.
1993 Workshop on "Dense Stellar Systems," Santa Barbara, CA; The Cores of 47 Tuc and M15, September.
1994 Winter School, "Large-Scale Structure & Cosmology," Mysore, India; three lectures, November.
1995 Annual meeting of the American Association for the Advancement of Science (AAAS), Symposium title—"Year of Discovery with *HST*," Atlanta, GA, Great Balls of Stars, February.
1995 Aspen Summer Workshop on "Dense Stellar Systems," Aspen, CO; The Center of M15 as revealed by *HST*/WFPC2, June.
1995 International Astronomical Union 174, "Dynamical Evolution of Star Clusters," Tokyo, Japan; *HST* Studies of the Dense Central Regions of Globular Clusters, August.
1996 Asian Pacific Regional meeting, Pusan, Korea; Globular Cluster Cores, August.
1997 Green Bank Meeting, "Highly Redshifted Radio Lines," Green Bank, WV; Luminosity-Linewidth Relation as a Probe of Galaxy Evolution, October.

1997 International Astronomical Union, Joint Discussion 15, "Stellar Dynamics," Kyoto, Japan; Evolved Stellar Populations in Globular Cluster Cores, August.

1997 Santa Cruz Summer Meeting, "Galactic Halos," Santa Cruz, CA; Stars in Local Group Suburbia: Red Giants in M31's Outer Spheroid and a Search for Stars in the Magellanic Stream, August.

1997 Symposium on "Star Clusters," Mt. Sorak, Korea; Density Profiles and Stellar Populations of Dense Globular Cluster Cores, February.

1998 International Astronomical Union Colloquium No. 171, "The Low Surface Brightness Universe," Cardiff, UK; Optical Cirrus, July.

1999 "Invencao" conference, Sao Paulo, Brazil; Subtract the Sky, August.

2000 American Museum of Natural History workshop, "Stellar Collisions," New York, NY; Stellar collisions and Mergers in Real Space Versus Pixel Space, May.

2000 SPIE meeting, "Discoveries and Research Prospects with 8- to 10-Meter-Class Telescopes," Munich, Germany; Keck Studies of M31's Stellar Halo, March.

2001 Annual meeting of the American Association for the Advancement of Science (AAAS), Symposium title–"From Gas to Galaxies: A Cosmic Conundrum," San Francisco, CA; The M31 Subgroup: A Fossil Record of Galaxy Formation and Evolution, February.

2001 Ringberg workshop, "Low Mass Galaxies and Constraints on Dark Matter," Ringberg Castle, Germany; Metalliity and Kinematics of the M31 Dwarf Satellites, August.

2001 Yale workshop, "Intrinsic Shapes of Galaxy Halos," New Haven, CT; Keck Spectroscopyof Red Giants in M31's Stellar Halo, June.

2002 Herzberg Institute of Astrophysics mini-workshop, "Galaxies," Victoria, BC, Canada; M31: A Fossil Record of Galaxy Formation and Evolution, August.

2003 Banff International Research Station workshop, "Galaxy Formation: A Herculean Challenge," Banff, Canada; The Outskirts of M31: Keck Spectroscopy of Red Giants, November.

2003 Institute for Advanced Studies, Hebrew University workshop, "Galaxy Formation," Jerusalem, Israel; M31's Stellar Halo: Substructure, Dynamics and Metallicity, and Dwarf Spheroidal Satellites of M31 and Dwarf Ellipticals in Virgo (two talks), June.

2003 Kavli Institute for Theoretical Physics conference, "Globular Clusters: Formation, Evolution, and the Role of Compact Objects," Santa Barbara, CA; A Deep, High-Resolution Study of the Core of 47 Tucanae, January.

2003 Space Telescope Science Institute symposium, "The Local Group as an Astrophysical Laboratory," Baltimore, MD; The Halo and Companions to M31, May.

2005 Mass and Mystery in the Local Group, Institute of Astronomy, Cambridge, U.K.; "M31's Extended Halo: Structure, Dynamics, and Metallicity," July.

2005 Resolved Stellar Populations, Cancun, Mexico; "M31's Extended Halo: Dynamics, (Sub)Structure, and Chemical Abundance" (review talk), April.

2006 Applications of Gravitational Lensing: Unique Insights into Galaxy Formation and Evolution, Kavli Institute for Theoretical Physics, Santa Barbara, CA; "Substructure in M31's Stellar Halo," October.

2006 Deconstructing the Local Group—Dissecting Galaxy Formation in our Own Background, Aspen Center for Physics, Aspen, CO; "A Sample of Results from the AEGIS Survey," June.

2006 Deconstructing the Local Group—Dissecting Galaxy Formation in our Own Background, Aspen Center for Physics, Aspen, CO; "Dwarf Galaxies in the Local Group and Beyond," June.

2006 Local Group Cosmology, Aspen Center for Physics, Aspen, CO; "The Stellar Halo of the Andromeda Spiral Galaxy," February.

2007 Astrophysical Probes of Dark Matter, University of California (Center for Cosmology), Irvine, CA; "M31's Extended Stellar Halo and Dwarf Satellites," March.

2007 Science in the Era of TMT, University of California (Center for Cosmology), Irvine, CA; "Studying Galaxy Assembly in the Local Volume in the TMT Era," July.

2007 The Globular Cluster-Dwarf Galaxy Connection, University of Michigan, Ann Arbor, MI; "M31's Dwarf Galaxy Building Blocks," August.

2008 Building the Milky Way (workshop) and Back to the Galaxy II (conference), Kavli Institute for Theoretical Physics, Santa Barbara, CA; "The SPLASH Survey and Hierarchical Galaxy Halo Formation," September.

2008 Galactic Structure and the Structure of Galaxies, Ensenada, Mexico; "Lessons from M31," March.

2009 The Milky Way and the Local Group—Now and in the Gaia Era, Heidelberg, Germany; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," August.

2009 Southern Cross Astrophysics Conference Series: II. Galaxy Metabolism, Sydney, Australia; "The SPLASH Survey and the Progressive Stages of Hierarchical Galaxy Formation," June.

2009 Unveiling the Mass: Extracting and Interpreting Galaxy Masses conference, Queen University, Kingston, Ontario, Canada; "Galaxy Dynamics and Mass Constraints from the SPLASH Survey: From Local Group to Dwarf Satellite Scales," June.

2010 2010 Hubble Fellows Symposium (special 20th anniversary edition), Baltimore, MD; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation" and "Hubble Fellow Family Tree," March.

2011 KraftFest, UCSC, Santa Cruz, CA; "The Stellar Halo of M31: Chemical Abundance Patterns and Coadded Spectra," July.

2011 Santa Cruz Galaxy Workshop, UCSC, Santa Cruz, CA; "M31's Unusual Bulge," August.

2012 The Great Andromeda Galaxy: A Workshop to Celebrate Martin Schwarzschild's Centennial, Princeton University, Princeton, NJ; "M31 and the Deathly Halos: Results from the SPLASH Survey," June.

2013 Keck Observatory 20th Anniversary Science Meeting, Kohala, HI; "Mergers and Acquisitions by the Andromeda Galaxy as Documented by Keck," March.

2014 Panelist, Mentoring of students, Annual workshop for National Science Foundation Astronomy & Astrophysics Postdoctoral Fellows, Washington, DC, January.

2014 Talk at the French-American International School's Friends of STEM and TeenTechSF's informational evening about national science fair competitions, San Francisco, CA; coordinator: Marc Robert Wong; "The UCSC SIP program and Preparing to Compete in the Siemens and Intel Science Competitions," January.

2014 Nuclear Clusters in Galaxies and the Role of the Environment, Lorentz Center, Leiden, The Netherlands; "Spectroscopy of the Nuclei and Globular Cluster Satellites of Virgo Cluster Dwarf Elliptical Galaxies," June.

2014 Unsolved Problems in Astrophysics and Cosmology, Eötvös University, Budapest, Hungary; "Unsolved Problems in Galaxy Formation: Dwarf Galaxies and the Andromeda and Milky Way Halos," July.

2014 Thirty-Meter Telescope Science Forum, International Science Definition Team session on Milky Way and Galaxies, Tucson, AZ; "Summary of Contributions – Nearby Galaxies" and "Getting Ready for TMT by Pushing the Keck Telescope to its Limits," July.

2014 Santa Cruz Galaxy Workshop, Santa Cruz, CA; "HALO7D: Looking at and through the Milky Way," August.

2014 Knappfest, Princeton, NJ; "The Outskirts of Galaxies," September.

2015 Santa Cruz Galaxy Workshop, UCSC, Santa Cruz, CA; "Dynamics of the Outskirts of Galaxies: Some Results from the NGVS," August.

2016 Bay Area High School Research Symposium, Stanford University, Stanford, CA; "The UCSC Science Internship Program and the Global SPHERE Network," February.

2016 Maximizing Science in the Era of LSST: A Community-based Study of Needed US OIR Capabilities, Biosphere 2, Oracle, AZ; study group on "Milky Way and Resolved Stellar Populations," May.

2016 Southern Spectroscopic Survey Workshop, Argonne National Lab, Lemont, IL; "Local Dwarf Galaxies," August.

2016 A Symposium to Celebrate the Life of Michael A. Jura, UCLA, Los Angeles, CA; "Studying Dust for Dust's Sake: How Mike Jura Inspired a Young Astronomer," September.

2016 Panoramas of the Evolving Cosmos, 6th Subaru International Conference, Hiroshima, Japan; "The Stellar Halos of Galaxies," December.

2017 The Galactic Renaissance, California Institute of Technology, Pasadena, CA; "The Stellar Halos of Galaxies," February.

2017 Large Surveys of the Great Andromeda Galaxy, Lorentz Center, Leiden, The Netherlands; "The SPLASH Survey," July.

2017 JvGFest2017: Gas and Galaxy Evolution, Stanley, ID; "The Stellar Halos of Galaxies," August.

2017 Subaru-WFIRST Synergistic Observation Workshop, Tokyo, Japan; "WFIRST Infrared Nearby Galaxy Survey," December.

2018 NOAO Community Needs for Science in the 2020s: Decadal Survey Community Planning Workshop, Tucson, AZ; breakout groups on "Faint Universe," "Science with Large Samples," and "Wide-field Spectroscopy," February.

2018 Santa Cruz Galaxy Workshop, UCSC, Santa Cruz, CA; "Stellar Halos in Three Environments," August.

2018 Sigma Xi Annual Meeting and Student Research Conference, Burlingame, CA; "Global SPHERE Network" (with Emily Entress Clark & Anne Simonis), October.

2018 Symposium for Undergraduate Research at UCSC, Santa Cruz, CA; "The Value of Research and Engagement Beyond the Classroom" (keynote), December.

2019 Santa Cruz Galaxy Workshop, UCSC, Santa Cruz, CA; "Stellar Disk Kinematics and Rare Stars in M31 and M33," August.

2020 Annual meeting of the American Association for the Advancement of Science (AAAS), Seattle, WA; STEM Research Experiences for High School Students (scientific session with Or Graur & Srikant Iyer), February.

Seminars and Colloquia

1988 National Radio Astronomy Observatory, Socorro, NM; "Ultradeep Imaging of Faint Galaxies," July.

1989 Princeton University Ph.D. Thesis Seminar, Princeton, NJ; "The Night Sky at Low Surface Brightness: Optical Cirrus Clouds and Distant Field Galaxies," May.

1992 Indian Institute of Astrophysics, Bangalore, India; "Optical Properties of IRAS 100 Micron Cirrus Clouds," September.

1992 National Centre for Radio Astronomy, Pune, India; "Evolution of Faint Blue Field Galaxies," September.

1992 Raman Research Institute, Bangalore, India; "Using *HST* to Probe the Core of 47 Tuc,"September.

1992 Rutgers University, New Brunswick, NJ; "Faint Blue Galaxies," July.

1992 Tata Institute of Fundamental Research, Bombay, India; "The Nature and Evolution of Faint Field Galaxies," September.

1993 Indian Institute of Astrophysics, Bangalore, India; "Faint Blue Field Galaxies," August.

1993 Pennsylvania State University, State College, PA; "Faint Blue Galaxies," July.

1993 Raman Research Institute, Bangalore, India; "Near Infrared Tully-Fisher Relation in the Coma Supercluster," August.

1994 University of California, San Diego, CA; "*HST* Studies of Dense Globular Cluster Cores," November.

1994 University of Maryland, College Park, MD; "Near Infrared Tully-Fisher Relation in the Coma Supercluster," February.

1995 Lawrence Livermore National Laboratory, Livermore, CA; "*HST* Studies of the Central Regions of Dense Globular Clusters," February.

1995 Steward Observatory/National Optical Astronomy Observatories, Tucson, AZ; "Using *HST* to Study Dense Globular Cluster Cores," October.

1995 University of Nevada, Las Vegas, NV; "Density Profiles and Stellar Populations of Dense Globular Cluster Cores," September.

1995 University of Washington, Seattle, WA; "Density Profiles and Stellar Populations of Dense Globular Cluster Cores," November.

1996 Cerro-Tololo Interamerican Observatory, La Serena, Chile; "Evolution and Internal Kinematics of Distant Field Galaxies," February.

1997 National Radio Astronomy Observatory, Charlottesville, VA; "Stars in Local Group Suburbia: Red Giants in M31's Outer Spheroid and a Search for Stars in the Magellanic Stream," October.

1997 National Radio Astronomy Observatory, Socorro, NM; "Evolution and Internal Kinematics of Distant Field Galaxies," June.

1997 Ohio State University, Columbus, OH; "Evolution and Internal Kinematics of Distant Field Galaxies," November.

1997 Pontifica Universidad Catolica, Santiago, Chile; "El Enigma de las Galaxias Azules Debiles," April.

1997 Seoul National University, Seoul, Korea; "Faint Blue Galaxies: Evolution and Internal Kinematics," February.

1997 Yonsei University, Seoul, Korea; "Near Infrared Tully-Fisher Relation in Coma" and "Red Giants in M31's Outer Spheroid," February.

1998 Raman Research Institute, Bangalore, India; "Optical Cirrus," September.

1999 Herzberg Institute of Astrophysics, Victoria, BC, Canada; "Optical Cirrus," March.
1999 Observatories of the Carnegie Institution of Washington, Pasadena, CA; "The Outer Stellar Halo of M31 and the Milky Way Galaxy," October.
1999 Observatorio Nacional, Rio de Janeiro, Brazil; "Studies of M31's Stellar Halo," August.
1999 University of British Columbia, Vancouver, BC, Canada; "Local Group Suburbia," March.
1999 University of California at Berkeley, Berkeley, CA; "Optical Cirrus," February.
1999 University of Hawaii, Institute for Astronomy, Honolulu, HI; "Studies of M31's Stellar Halo," September.
2000 Arizona State University, Tempe, AZ; "Dissecting M31's Stellar Halo with the Keck Telescope," October.
2000 Columbia University, New York, NY; "Stars in the Outskirts of the Local Group," March.
2000 Institute for Advanced Study, Princeton, NJ; "Keck Studies of M31's Stellar Halo," July.
2000 Lawrence Livermore National Laboratory (IGPP), Livermore, CA; "Dissecting M31's Stellar Halo with the Keck Telescope," November.
2000 University of Florida, Gainesville, FL; "Dissecting M31's Stellar Halo with the Keck Telescope," September.
2000 University of Pittsburgh, Pittsburgh, PA; "Stars in the Outskirts of the Local Group," March.
2000 Yale University, New Haven, CT; "Stars in the Outskirts of the Local Group," July.
2001 Space Telescope Science Institute, Baltimore, MD; "The M31 Subgroup: A Fossil Record of Galaxy Formation and Evolution," March.
2001 University of Virginia, Charlottesville, VA; "The M31 Subgroup: A Fossil Record of Galaxy Formation and Evolution," March.
2002 California Institute of Technology, Pasadena, CA; "M31's Stellar Halo and Dwarf Galaxy Building Blocks," October.
2002 Harvard-Smithsonian Center for Astrophysics, Cambridge, MA; "Dissecting the Stellar Populations of M31 and its Dwarf Companions with the Keck Telescope," June.
2002 New York University, New York, NY; "Galaxies, Near and Far: Building Blocks of the Universe," September.
2002 New York University, New York, NY; "M31: A Fossil Record of Galaxy Formation and Evolution," September.
2002 University of British Columbia, Vancouver, BC, Canada; "Galaxies, Near and Far: Building Blocks of the Universe," September.
2002 University of California at San Diego, San Diego, CA; "Keck Spectroscopy of Red Giants in M31 and its Dwarf Companions," April.
2002 University of California, Santa Barbara, CA; "The Stellar Halo of the Andromeda Spiral Galaxy and Dwarf Galaxy Building Blocks," December.
2002 University of Victoria, Victoria, BC, Canada; "Galaxies, Near and Far: Building Blocks of the Universe," October.
2002 University of Washington, Seattle, WA; "Galaxies, Near and Far: Building Blocks of the Universe." November.
2003 Herzberg Institute of Astrophysics/Dominion Astrophysical Observatory, Victoria, BC, Canada; "The Halo of M31 and Dwarf Galaxy Building Blocks," March.

2003 University of Washington, Seattle, WA; "Stellar Halo of the Andromeda Spiral Galaxy and Dwarf Galaxy Building Blocks," February.

2004 Institute for Advanced Study, Princeton, NJ; "The Assembly of M31's Stellar Halo from Dwarf Galaxy Building Blocks," October.

2004 University of California at Santa Cruz, Santa Cruz, CA; "The Assembly of M31's Stellar Halo from Dwarf Galaxy Building Blocks," November.

2005 Canada-France-Hawaii Telescope, Waimea, HI; "The Extended Stellar Halo of Andromeda: Dynamics, Structure, and Chemical Abundance," June.

2005 Royal Observatory of Edinburgh, Edinburgh, UK; "The Andromeda Spiral Galaxy," July.

2005 University of California at Davis, Davis, CA; "The Stellar Halo of the Andromeda Spiral Galaxy and Dwarf Galaxy Building Blocks," April.

2005 University of California at Irvine, Irvine, CA; "The Stellar Halo of the Andromeda Spiral Galaxy," March.

2006 California Institute of Technology, Pasadena, CA; "The Extended Stellar Halo of the Andromeda Spiral Galaxy," March.

2006 Harvard-Smithsonian Center for Astrophysics (Institute for Theory and Computation), Cambridge, MA; "The Extended Metal-Poor Stellar Halo of the Andromeda Spiral Galaxy," May.

2006 Space Telescope Science Institute, Baltimore, MD; "The Stellar Halo of the Andromeda Spiral Galaxy," January.

2006 University of California Berkeley (Theoretical Astrophysics Center), Berkeley, CA; "M31's Extended Stellar Halo and Dwarf Satellite Galaxies," August.

2006 University of California San Diego (Center for Astrophysics and Space Sciences), La Jolla, CA; "The Extended Stellar Halo and Dwarf Satellites of the Andromeda Spiral Galaxy," October.

2007 Herzberg Institute of Astrophysics, Victoria, BC, Canada; "The Extended Stellar Halo of the Andromeda Spiral Galaxy and its Dwarf Satellites," July.

2007 Massachusetts Institute of Technology, Cambridge, MA; "The Extended Stellar Halo of the Andromeda Spiral Galaxy and its Dwarf Satellites," April.

2007 University of California Santa Cruz, Santa Cruz, CA (mini-FLASH); "The Extended Stellar Halo and Dwarf Satellites of Andromeda," July.

2008 Department of Physics, Durham University, Durham, United Kingdom; "The Extended Stellar Halo of the Andromeda Spiral Galaxy and its Dwarf Satellites: Results from the SPLASH Survey," August.

2008 Department of Physics, Oxford University, Oxford, United Kingdom; "The Extended Stellar Halo of the Andromeda Spiral Galaxy and its Dwarf Satellites: Results from the SPLASH Survey," August.

2008 Institute of Astronomy, Cambridge University, Cambridge, United Kingdom; "The Extended Stellar Halo of the Andromeda Spiral Galaxy and its Dwarf Satellites: Results from the SPLASH Survey," August.

2008 Lawrence Livermore National Laboratory, Livermore, CA; "The SPLASH Survey and Hierarchical Galaxy Formation," October.

2008 Louisiana State University, Baton Rouge, LA; "The Extended Stellar Halo and Dwarf Satelllites of Andromeda," March.

2008 Ohio State University, Columbus, OH; "Local Group lunch" (special seminar with Kathryn Johnston), April.

2008 Ohio University, Athens, OH; "The Extended Stellar Halo and Dwarf Satelllites of Andromeda," April.

2009 American Museum of Natural History, New York, NY; "Andromeda the Cannibal: The SPLASH Survey and Prospects with TMT," April.

2009 Columbia University, New York, NY; "Andromeda the Cannibal: The SPLASH Survey and Prospects with TMT," April.

2009 San Francisco State University, Astronomy department, San Francisco, CA; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," September.

2009 Stanford University/Kavli Institute for Particle Astrophysics and Cosmology, Stanford, CA; "Andromeda the Cannibal: The SPLASH Survey and Prospects with TMT," March.

2009 Tata Institute for Fundamental Research, Astronomy department, Mumbai, India; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," August.

2009 University of California Irvine, Physics and Astronomy department, Irvine, CA; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," November.

2010 South African Astronomical Observatory, Cape Town, South Africa; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," April.

2010 University of Colorado Boulder, Astronomy department, Boulder, CO; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," March.

2010 University of Nevada Las Vegas, Astronomy department, Las Vegas, NV; "Andromeda the Cannibal: The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," April.

2010 University of Hawaii, Honolulu, HI; "Cannibalism and Forensics in our Galactic Neighborhood," October.

2010 Kavli Institute of Astronomy and Astrophysics, Beijing, China; "Using Andromeda as a Testbed of Hierarchical Galaxy Formation," December.

2011 Observatorio Nacional, Rio de Janeiro, Brazil; "The Stellar Halo of Andromeda," February.

2011 National Science Foundation (Astronomical Division), Washington DC; "SPLASH: The Spectroscopic and Photometric Landscape of Andromeda's Stellar Halo," March.

2011 University of San Francisco, San Francisco, CA; "SPLASH: The Spectroscopic and Photometric Landscape of Andromeda's Stellar Halo," March.

2011 Sonoma State University, Rohnert Park, CA; "The Galaxy Next Door," March.

2011 University of California at Los Angeles, Los Angeles, CA; "Andromeda's Halo: Ghosts of Satellites Past," March.

2011 University of Massachussetts, Amherst, MA; "Cannibalism and Forensics in our Galactic Neighborhood," April.

2011 Smith College, Northampton, MA; "Our Place in the Cosmos," April.

2011 University of California at Davis, Davis, CA; "The SPLASH Survey and Hierarchical Galaxy Formation," May.

2011 Shanghai Astronomical Observatory, Shanghai, China; "Past and Present Satellites of Andromeda," June.

2012 University of California at Davis, Davis, CA; "Kinematics and Stellar Populations of the Structural Subcomponents in Andromeda's Inner Regions: Keck Spectra and HST Images," February.

2012 Canada-France-Hawaii Telescope headquarters, Waimea, HI; "Dissecting Andromeda's Enigmatic Inner Spheroid: The SPLASH and PHAT Surveys," February.

2012 Columbia University, New York, NY – astronomy department pizza lunch; "The SPLASH Survey," April.

2012 Department of Astrophysics, Universidad Complutensia Madrid, Madrid, Spain; "Kinematics and Stellar Populations of the Structural Subcomponents in Andromeda's Inner Regions," June.

2012 Research Center for Astronomy, Academy of Athens, Athens, Greece; "Our Neighbor M31: A Close-up View of Galaxy Formation," June.

2012 Satyendra Nath Bose National Centre for Basic Sciences, Kolkata, India; "Our Place in the Cosmos: The Lives and Times of Galaxies," November.

2013 Institute for Advanced Study, Princeton, NJ; "The Andromeda Galaxy and its Satellites: A Close-up View of Galaxy Formation," February.

2013 University of Utah, Salt Lake City, UT; "The Andromeda Galaxy: Hierarchical Galaxy Formation, Stellar Populations, and the Interstellar Medium," April.

2013 Tohoku University, Sendai, Japan; "The Andromeda Galaxy: Hierarchical Galaxy Formation, Stellar Populations, and the Interstellar Medium," June.

2013 Institute for the Physics and Mathematics of the Universe (IPMU), Tokyo, Japan; "The Andromeda Galaxy: Hierarchical Galaxy Formation, Stellar Populations, and the Interstellar Medium," June.

2013 Department of Astronomy, Ohio State University, Columbus, OH; "The Outskirts of Galaxies," October.

2013 Columbia University, New York, NY – astronomy department pizza lunch; "Dark matter in Virgo Cluster dEs and the HALO7D Survey," November.

2014 Kavli Institute of Astronomy/Astrophysics, Peking University, Beijing, China; "The Outskirts of Galaxies," August.

2014 Thirty-Meter Telescope project office, Pasadena, CA; "Getting Ready for TMT by Pushing the Keck Telescope to its Limits," September.

2014 Institute for Astronomy, University of Hawaii, Manoa, HI; "The Dynamic and Mysterious Outskirts of Galaxies," October.

2014 Department of Chemistry and Biochemistry, University of California Santa Cruz, Santa Cruz, CA; 2014 Kenny Ikei Memorial Lecture: "Galaxies and the Periodic Table of Elements," October.

2015 Harvard-Smithsonian Center for Astrophysics (Institute for Theory and Computation), Cambridge, MA; "Looking at and Through the Milky Way," February.

2015 Harvard-Smithsonian Center for Astrophysics (Institute for Theory and Computation), Cambridge, MA; "Dynamics of Galaxies Big and Small," February.

2015 UCSC Department of Astronomy & Astrophysics, FLASH talk, Santa Cruz, CA; "Dynamics of Galaxies Big and Small," March.

2015 Swinburne University of Technology, Centre for Astrophysics and Supercomputing, Galaxy Evolution and Modeling seminar, Melbourne, Australia; "Dynamics of Galaxies Big and Small," April.

2016 UCSC Department of Astronomy & Astrophysics, FLASH talk, Santa Cruz, CA; "The UCSC Science Internship Program and the Global SPHERE Network," January.

2016 Monterey Institute for Research in Astronomy, Monterey, CA; "The Universe of Galaxies and STEM Research Opportunities for Young People," May.

2016 Columbia University, Astronomy department pizza lunch, New York, NY; "The HALO7D Survey" (with Emily Cunningham), November.

2017 Sonoma State University, Rohnert Park, CA; "The Universe of Galaxies and STEM Research Opportunities for Young People," February.

2017 University of California at Davis, Davis, CA; "Stellar Halos of Galaxies," May.

2017 Michigan State University, East Lansing, MI; "The SPLASH Survey of the Andromeda Galaxy," September.

2017 University of Michigan, Ann Arbor, MI; "Stellar Halos of Galaxies," September.

2017 Columbia University, New York, NY – astronomy department pizza lunch; "Globular Clusters in the Core of the Virgo Cluster from the NGVS Survey," November.

2018 Tel-Aviv University, Tel-Aviv, Israel; John Bahcall Astrophysics Lecture: "Stellar Halos as Tracers of Dark Matter Assembly and Chemical Enrichment on Galaxy Scales," January.

2018 Hebrew University, Jerusalem, Israel; "The SPLASH Survey of the Andromeda Galaxy," January.

2018 Monterey Institute for Research in Astronomy, Monterey, CA; "The Cosmic Microwave Background Radiation, Inflation, and Gravity Waves," April.

2018 Columbia University, New York, NY – astronomy department pizza lunch; "The dynamics of stars and gas in the disks of M31 and M33," November.

2018 Monterey Institute for Research in Astronomy, Monterey, CA; "Inflation and the Cosmic Mictrowave Background Horizon Problem," December.

2019 National Centre for Radio Astronomy, Pune, India; "The SPLASH Survey of the Andromeda Galaxy," May.

2019 Brown University, Providence, RI; "Stellar Halos in Different Environments," September.

2019 Yale University, New Haven, CT; "Stellar Disk Kinematics and Rare Stars in M31 and M33," September.

2019 New Mexico State University, Las Cruces, NM; "The SPLASH Survey of M31 and M33," October.

2019 University of Wisconsin, Madison, WI; "The SPLASH Survey of the Andromeda Galaxy," November.

2020 Texas A&M University, College Station, TX – lunch seminar; "Galactic Halos of Local Volume Galaxies," January.

2020 Texas A&M University, College Station, TX – colloquium; "The SPLASH Survey of the Andromeda Galaxy," January.

2020 St. Xavier's College, Kolkata, India – Physics department colloquium; "The Andromeda Galaxy: A Testbed for Studies of Dark Matter and Galaxy Interactions," February.

2020 Columbia University – pizza lunch; "The Milky Way Stellar Halo: Half Way to M31," March.

2020 Princeton University, Princeton, NJ – galaxies journal club; "Asymmetric Drift in the Andromeda Galaxy (M31) as a Function of Stellar Age," March.

2020 Space Telescope Science Institute, Baltimore, MD – WFIRST Virtual Lecture Series; "Three WFIRST Science Cases for Local Volume Galaxies: Milky Way Halo Star Proper Motions, the Edge of M31's Stellar Halo, and Globular Clusters in the Virgo Cluster," April.

2020 Space Telescope Science Institute, Baltimore, MD (virtual)– Friday Science Coffee; "Globular Cluster Satellites of Virgo Cluster Galaxies," May.

2020 Virtual lecture for Johns Hopkins U./Space Telescope Science Institute summer interns; Galaxies, Black Holes, and Schrödinger's Cat; June.

2020 Herzberg Astronomy and Astrophysics Research Centre, National Research Council of Canada – virtual seminar; "Andromeda, Triangulum, and the Milky Way: Galaxy Dynamics and Rare Stellar Populations," June.

2020 Virtual lecture for Johns Hopkins U. Astrocoffee; "Updated Constraints on Asteroid-mass Primordial Black Holes as Dark Matter," June.

Public Lectures/Presentations

1989 Princeton University Public Lecture; "The Universe of Galaxies," February.

1989 Amateur Astronomers Club, Holmdel, NJ; "Studying Very Distant Galaxies with the Help of Deep CCD Images," April.

1990 Amateur Astronomers Club, Princeton, NJ; "Galaxy Evolution," July.

1991 Rotary Club, Calcutta, India; "Olbers' Paradox," July.

1991 Friends of the Institute for Advanced Study; "The Unique Capabilities of the *Hubble Space Telescope*," September.

1992 Rutgers University, Physics seniors; "Studying the Past History of the Universe of Galaxies," May.

1993 Jadavpur University, Calcutta, India; "Optical Cirrus," July.

1994 University of Calcutta, Science College, Calcutta, India; "Galaxy Evolution," August.

1995 Santa Cruz Astronomy Club, Santa Cruz, CA; "The Evolution of Galaxies," March.

1996 Yosemite National Park, LeConte Memorial; "Galaxies: Wildlife of the Universe," August.

1997 Lick Summer Lecture Series, Mount Hamilton, CA; "The Universe of Galaxies Viewed through a Time-Machine," August.

1998 Lick Summer Lecture Series, Mount Hamilton, CA; "The Universe of Galaxies through a Time-Machine," July.

1998 Saha Institute for Nuclear Physics, Calcutta, India; "Interstellar Dust," August.

1999 Lick Summer Lecture Series, Mount Hamilton, CA; "The Universe of Galaxies," July.

1999 Yosemite National Park, LeConte Memorial (two presentations); "A Hike through the Universe of Galaxies" and "A Journey through the Universe in a Time-Machine," September.

1999 Saha Institute for Nuclear Physics, Calcutta, India; "Standard Candles, Standard Rulers and the Fate of the Universe," December.

2000 Minolta Planetarium, De Anza College, Cupertino, CA; "Telescopes as Time-Machines," March.

2000 Adaptive optics demos and presentations (with Patrik Jonsson) at two special events at the San Francisco Metreon and San Jose Tech Museum; organized by the Bay Area Economic Forum, May.

2000 Lick Summer Lectures (Music of the Spheres Series), Mount Hamilton, CA; "The Universe of Galaxies through a Time-Machine," July.

2001 Kiwanis Club, Watsonville, CA; "Galaxy Evolution," talk and slide show, April.

2001 Lick Summer Lectures (Music of the Spheres Series), Mount Hamilton, CA; "The Birth and Evolution of Galaxies: Time Machines, Cannabalism, and Chemical Abuse," June.

2002 Chaminade, Santa Cruz, CA; guided star-gazing and presentation for Lend Lease Foundation (with Jason Melbourne and Marla Geha), May.

2002 Lick Summer Lectures (Music of the Spheres Series), Mount Hamilton, CA; "Birth and Evolution of Galaxies: Time Machines, Cannibalism and Chemical Pollution," June.

2002 Dominion Astrophysical Observatory's "Centre of the Universe," Victoria, BC, Canada; "Galaxies, Time, and Light," August.

2003 Royal Astronomical Society of Canada, Victoria, BC Centre; "Galaxies, Time and Light," March.

2003 Lick Summer Lectures (Music of the Spheres Series), Mount Hamilton, CA; "The Milky Way, Schroedinger's Cat, and You," July.

2003 Indo-American Community Service Center, Santa Clara, CA; "History of the Universe: The Milky Way, Schroedinger's Cat, and You," October.

2003 Lecture for science policy makers and amateur astronomers, Pretoria, South Africa; "The Milky Way, Schroedinger's Cat, and You," December.

2004 Lecture for NASA astronauts, Woods Hole, MA; "The Milky Way, Schroedinger's Cat, and You," July.

2004 Lick Summer Lectures (Music of the Spheres Series), Mount Hamilton, CA; "The Milky Way, Schroedinger's Cat, and You," August.

2004–2005 Prepared deep Keck images of distant galaxies for Mauna Kea Astronomy Education Center, Hilo, HI/coordinator: Cheryl Braunstein

2005 Guest speaker, Santa Cruz County Medical Society meeting, Aptos, CA; "The Milky Way, Schroedinger's Cat, and You," June.

2005 Music of the Spheres Lectures, Mount Hamilton, CA; "The Milky Way, Schroedinger's Cat, and You," June.

2005 Keck Observatory public lecture, Waimea, HI; "The Milky Way, Schroedinger's Cat, and You," September.

2005 Hosted a group of 25 from the Santa Cruz Lifelong Learners, UCSC, Santa Cruz, CA/coordinator: Sandra Brauner; A Day in the Life of an Astronomer, October.

2005 Lecture for the Willow Glen Rotary Club, San Jose, CA/coordinator: Dan Foss; "Galaxies—Building Blocks of the Universe," December.

2006 Faculty lecture at UCSC extension, Osher Lifelong Learning Institute, Cupertino, CA/coordinator: Brendan Rawson; "The Milky Way, Schroedinger's Cat, and You," February.

2006 Physics Cafe (Q/A session for 20 adults and children—with Matthias Steinmetz), Aspen, CO/coordinator: Kevin Ward, February.

2006 Lecture for Santa Cruz Astronomy Club, Santa Cruz, CA/coordinator: Doreen Devorah; "The Milky Way, Schroedinger's Cat, and You," March.

2006 Physics is for Kids (lecture and Q/A session for 40 children and adults—with Kathryn Johnston—telecast on local channel), Aspen, CO/coordinator: Kevin Ward; The Formation of Galaxies, June.

2006 Music of the Spheres Lectures, Mount Hamilton, CA; "A Journey Back to the Big Bang," August.

2007 Keynote speaker at Fremont Peak Observatory Association annual "Star b Que" to 250 amateur astronomers from all over Northern California, San Juan Bautista, CA/coordinator: Doug Smith; "A Journey Back to the Big Bang," August.

2007 Music of the Spheres Lectures, Mount Hamilton, CA; "A Journey Back to the Big Bang," August.

2007 Lecture to Gilroy Sunrise Rotary, Gilroy, CA (audience of about 30)/ coordinator: Roy Johnson; Journey Back to the Big Bang; November.

2007 Journey Back to the Big Bang; UCO/Lick staff retreat, Santa Cruz, CA, November.

2008 Lecture to Willow Glen Rotary, San Jose, CA (audience of about 20)/ coordinator: Mike Anderson; Journey Back to the Big Bang; May.

2008 Lecture and participation in Tesla coil demo at Maker Faire, San Mateo, CA (audiences of about 50)/ coordinators: Terry Schalk & Hartmut Sadrozinski (SCIPP); Making of Galaxies and the Universe (an astronomer's view); May.

2008 Music of the Spheres lectures, Mount Hamilton, CA; A Journey Back to the Big Bang; June.

2008 Lecture to Mount Diablo Astronomical Society, Concord, CA (audience of about 40)/coordinator: Marni Berendsen; A Journey Back to the Big Bang; June.

2008 Lecture at SCIPP Quarknet teachers workshop at UCSC, Santa Cruz, CA (about 15 high school teachers and students)/coordinator: Hartmut Sadrozynski; A Journey Back to the Big Bang; June.

2009 Use of Keck/LRIS images of the M31 dwarf satellites Peg and Cas (aka And VI and VII) from the Grebel & Guhathakurta (1999, ApJL) article in the exhibition "Cosmos" at the Astronomical Observatory of Paris scheduled to run from June-November 2009; coordinator: Ange'lique Durand (photo librarian, Palais de la de'couverte—scientific and educational museum, Avenue Franklin Delano Roosevelt, 75008 Paris), April.

2009 Material for planetarium show segment on Keck Observatory research on the Milky Way and Andromeda, Imiloa Astronomy Center, Hilo, HI; coordinators: Jack White (script writer/producer, Sky Skan production company) and Ashley Yeager (W.M. Keck Observatory, public information officer), April.

2009 Astronomy slides and narrative for Bach concert at the Santa Cruz Baroque Festival (III. Cosmos: The Art of the Fugue), Santa Cruz, CA; coordinator: Linda Burman-Hall—narrator: Evan Kirby, April.

2009 Music of the Spheres lectures, Mount Hamilton, CA; Our Place in the Cosmos, June.

2009 Summer Visitor Program lectures, Mount Hamilton, CA; Our Place in the Cosmos, July.

2009 Guest lecture for Ambuja Group employees, Vishwakarma auditorium, Kolkata, India; audience of about 50/coordinator: Harsh Neotia (managing director); "Our Place in the Cosmos," August.

2009 Use of Keck/LRIS image of the M31 dwarf satellite Peg (aka And VI) from the Grebel & Guhathakurta (1999, ApJL) article in the course "Exploring Galaxies and the Cosmos" in the online graduate degree program "Swinburne Astronomy Online" at Swinburne University of Technology, Australia; December.

2010 Participation in Tesla coil demo at Valencia Elementary School, Aptos, CA (audience of about 150)/ coordinators: Terry Schalk & Hartmut Sadrozinski (SCIPP); April.

2010 Lecture on "Our Place in the Cosmos" for University Forum, University of Nevada Las Vegas, NV; April.

2010 Summer Visitor Program lectures, Mount Hamilton, CA; Our Place in the Cosmos, August.

2010 Participation in Tesla coil demo at Castilleja School, Palo Alto, CA (audience of about 500)/coordinators: Terry Schalk & Hartmut Sadrozinski (SCIPP); November.

2011 Slide presentation for UCSC Scholarship Benefit Dinner/coordinator: Jeff Rockwell (UCSC Special Events); February.

2011 Career day presentations, Silver Creek High School, San Jose, CA (audience of four groups of 150–200 students each)/coordinator: Ka-Ling Scoppettone and Imani Butler (Silver Creek HS); April.

2011 Music of the Sphere lectures, Mount Hamilton, CA; Astronomy and Cosmology (not to be confused with Astrology, Gastronomy and Cosmetology), June.

2011 Talk at the Santa Cruz Astronomy Club, Santa Cruz, CA; Astronomy and Cosmology (not to be confused with Astrology, Gastronomy and Cosmetology), September.

2011 Talk at the San Jose Astronomical Association, San Jose, CA; Astronomy and Cosmology (not to be confused with Astrology, Gastronomy and Cosmetology), October.

2011 Presentation to the Society of Physics Students, UCSC, Santa Cruz, CA; Our Place in the Cosmos; November.

2012 Keynote presentation to parents of Warm Springs Elementary School students at their Second Annual Science Alliance Showcase (audience of about 750), Fremont, CA; coordinator: Clyde Mann; Our Life in the Universe; March.

2012 Talk at the Birla Industrial and Technological Museum, Kolkata, India; coordinator: Emdadul Islam; Our Place in the Cosmos; May.

2012 Music of the Sphere lectures, Mount Hamilton, CA; Mergers and Acquisitions: The Lives and Times of Galaxies; June.

2012 Talk at the Birla Industrial and Technological Museum, Kolkata, India; coordinator: Subhashish Das; Black Holes and Telescopes as Time Machines; November.

2013 Talk at the Campbell Rotary, Campbell, CA; Our Place in the Cosmos; May.

2013 Talk at the Los Altos Rotary, Los Altos, CA; Our Place in the Cosmos; August.

2013 Music of the Sphere lectures, Mount Hamilton, CA; Island Universes; September.

2013 Panel discussion for the Society of Physics Students, UCSC, Santa Cruz, CA; topic: Applying to and Getting Through Graduate School; October.

2013 Talk at the San Jose Rotary, San Jose, CA; Our Place in the Cosmos; December.

2014 Presentation (with Katie Hamren)/interactive demos at 3rd Friday event "Magic", Santa Cruz Museum of Art & History, Santa Cruz, CA; Magic of the Universe: Time Machines, Galaxy Collisions, Black Holes, and Stardust; coordinator: Stacey Marie Garcia; January.

2014 Talk at the Watsonville Rotary, Watsonville, CA; Our Place in the Cosmos; February.
2014 Talk at the Saratoga Rotary, Saratoga, CA; Our Place in the Cosmos; March.
2014 Talk at Griffith Observatory to the Friends of the Observatory (FOTO) group, Los Angeles, CA; Are Galaxies Island Universes?; May.
2014 Summer Visitor Program lectures, Mount Hamilton, CA; Are Galaxies Island Universes?; June.
2014 Talk to high school intern group in Jill Helms' Stanford STARS program, Stanford, CA; Are Galaxies Island Universes?; June.
2014 Talk to a group of high school students and their parents, Gillette, WY; Constellations of Stars and the Universe of Galaxies; July.
2014 Talk at the Santa Clara Rotary, Santa Clara, CA; Our Place in the Cosmos; September.
2015 Presentation, interactive demos, and video at 3rd Friday event "Magic", Santa Cruz Museum of Art & History, Santa Cruz, CA; Magic of the Universe: Time Machines, Galaxy Collisions, Black Holes, and Stardust; coordinator: Nora Grant; January.
2015 Discussion about UCSC's programs for high school students and campus tour for a group of 20 girls from Alvarez High School, Salinas, CA at the Conference for Undergraduate Women in Physics, UCSC/coordinators: Amita Kuttner, Angie Wolfgang (both at UCSC), and Bao Nguyen (Alvarez HS); January.
2015 Member of the professional career panel at the Highlight to the Future college and career conference, Watsonville High School, Watsonville, CA (audience of ~30 students and parents)/coordinator: Amanda Sandoval Estrada (UCSC EPC); February.
2015 Astronomy slides and narrative for Bach concert at the Santa Cruz Baroque Festival (The Birth of the Baroque, 17th Century, Age of Galileo), Santa Cruz, CA; coordinator: Linda Burman-Hall—narrator: Bill Mathews; February.
2015 Talk at Silver Creek Women's Club, San Jose, CA; We Are Stardust; March.
2015 Lunchtime public talk at the San Jose Museum of Art, San Jose, CA; We Are Stardust; coordinator: Rory Padeken (assistant curator); May.
2015 Talk at Rakesh and Dipti Mathur's house to an audience of ~30 Crystal Springs Uplands School students and parents, Saratoga, CA; The Universe of Galaxies; June.
2015 Presentation about astronomy simulation and fly-through videos in Diana Thater's Beta Space exhibition at a members' evening event at the San Jose Museum of Art, San Jose, CA; co-presenter: Rory Padeken (assistant curator); June.
2015 Evenings with Stars lectures, Mount Hamilton, CA; We Are Stardust; June.
2015 Lecture for Italian group, Fano, Italy; The Universe of Galaxies (L'universo del galassie); September.
2015 Lecture for Atheist Community of San Jose, San Jose, CA/coordinator: Lyn Chiu; We Are Stardust; November.
2015 Lecture for Santa Cruz Astronomy Club, Santa Cruz, CA/coordinator: Jeff Gose; The Universe of Galaxies; November.
2016 Lecture at Evergreen Valley College, Santa Cruz, CA/coordinators: Celso Batalha & Nargis Adham; The Universe of Galaxies and STEM Research Opportunities for Young People; March.

2016 Presentation and interactive demos (with Justin Brown, Eric Gentry and Alexa Villaume) at 3rd Friday event "The Cosmos," Santa Cruz Museum of Art & History, Santa Cruz, CA; The Magic of the Universe; coordinator: Nora Grant; May.

2016 Evenings with Stars lectures, Mount Hamilton, CA; Galaxies: Building Blocks of the Universe; July.

2017 Lecture on cruise boat Nemo, Galápagos Islands, Ecuador; The Story of the Milky Way: Our Place in the Cosmos; March.

2017 Lecture at the 37th Annual North American Bengali Conference 2017 Science and Technology Forum, Santa Clara Convention Center, Santa Clara, CA; The Universe of Galaxes and Our Place in the Cosmos; coordinators: Shampa Gupta & Mahua Banerjee; July.

2017 Music of the Spheres lectures, Mount Hamilton, CA; The Story of our Neighbor, the Andromeda Spiral Galaxy; July.

2017 Five lectures in the New Delhi, India, national capital region: one each at Pathways School (Noida), Vasant Valley School (Vasant Kunj), The Heritage School (Rohini), The Shri Ram School (Aravali), and LPS Global School (Noida); Careers in Astronomy and Astrophysics/Research During School; August/September.

2017 Guest speaker, India Literacy Project's annual dinner, Palo Alto, CA; The Universe of Galaxies and Engaging Youth in STEM Research; October.

2018 Lecture for Santa Cruz Astronomy Club, Santa Cruz, CA/coordinator: Al Smith; Galaxies, Gravitational Waves, and Black Holes; March.

2018 Family science presentation for Modesto Area Partners in Science, Modesto, CA; coordinator: Steve Murov; Our Place in the Cosmos; April.

2018 Evenings with Stars lectures, Mount Hamilton, CA; Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes; June.

2018 Astronomy on Tap lecture, Santa Cruz, CA; coordinator: David Coulter; Galaxy Formation and Cannibalism in our Galactic Backyard (with Amanda Quirk); July.

2018 Two lectures in the New Delhi, India, national capital region (with Prof. Raghavan Rangarajan/Ahmedabad U.): one each at Modern School (Vasant Vihar) and Scottish High International School (Gurugram); Astrophysics Research and Careers in Astronomy and Astrophysics; August.

2018 Speaker at Fremont Peak Observatory Association's Annual Member Meeting to 50 amateur astronomers from all over Northern California, San Juan Bautista, CA/coordinator: Patrick Donnelly; "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes," September.

2018 Lecture for San Jose Astronomical Association, San Jose, CA/coordinator: Sukhada Palav; Galaxies, Dark Matter, Cannibalism, Black Holes, and Gravitational Waves; September.

2019 Lecture at Nehru Planetarium, Mumbai, India/coordinator: Arvind Paranjpye; Galaxies: Dark Matter, Cannibalism, Black Holes, and the Periodic Table of Elements; May.

2019 Lecture at Inter-University Centre for Astronomy & Astrophysics, Pune, India/coordinator: Samir Dhurde; Galaxies, Dark Matter, and Life on Earth; May.

2019 Guest lecture at InfoGain global leadership retreat, Napa, CA; Our Place in the Cosmos; July.

2019 Public lecture at Brown University, Providence, RI; Galaxies: Dark Matter, Cannibalism, Black Holes, and the Periodic Table of Elements; September.

2019 Public lecture at California Polytechnic State University, San Luis Obispo, CA; The Universe of Galaxies: Dark Matter, Cannibalism, Black Holes, and the Periodic Table of Elements; October.
2020 Public lecture at Tollygunge Club, Kolkata, India/coordinator: Ronen Roy; Our Place in the Universe; February.
2020 Public lecture at W. M. Keck Observatory, Waimea, HI; The Darkest Secrets of the Universe; February.

Service to the Staff or Editorial Board of Scholarly Journals, or Other Publications

1990–1996 Referee, *Astronomical Journal*, American Institute of Physics
1991–1999 Referee, *Astrophysical Journal Letters*, University of Chicago
1994–1997 Referee, *Astrophysical Journal*, University of Chicago
1998–1999 Referee, *Astronomy & Astrophysics*, European Journal
2003 Referee, *Publications of the Astronomical Society of the Pacific*
2004 Referee, *Astrophysical Journal Letters*
2007 Referee, *Monthly Notices of the Royal Astronomical Society*

Membership and Activities in Professional Associations and Collaborations

1988– Member, American Astronomical Society (AAS)
1990–1993 Member, Cosmic Background Explorer (COBE) Science Team
1991–1993 Member, Indian Astronomical Society
1991–1994 Member, IRAM Key Project to study fine structure of molecular cirrus clouds
1992–1994 Associate Investigator, JHU group, on *HST* Medium-Deep Survey
1994 Member, American Association for the Advancement of Science (AAAS)
1999–2016 Member, DEEP2/AEGIS/DEEP3 Teams
1999–2003 Member, Center for Adaptive Optics (CfAO), UCSC
1999–2003 Member, Deep Lens Survey (DLS) Collaboration
2002– Lead, Spectroscopic and Photometric Landscale of Androemda's Stellar Halo (SPLASH) Collaboration
2007–2016 Member, PLUS (Participation in LAMOST US) Collaboration
2009– Member, Panchromatic Hubble Andromeda Treasury (PHAT) Collaboration
2010– Member, Large Synoptic Survey Telescope (LSST) Science Collaboration on Milky Way Structure and Local Volume
2012– Member, Next Generation Virgo Cluster Survey (NGVS) Collaboration
2013– Member, Thirty-Meter Telescope (TMT) International Science Definition Team on the Milky Way and Nearby Galaxies
2013– Member, Hubble Space Telescope Proper Motion (HSTPROMO) Collaboration
2013– Lead, Halo Assembly in Lambda-CDM: Observations in Seven Dimensions (HALO7D) Collaboration
2014– Member, Maunakea Spectroscopic Explorer (MSE; formerly ngCFHT) International Science Team
2015– Member, WFIRST (Wide-Field InfraRed Survey Telescope) Infrared Nearby Galaxy Survey (WINGS) Science InvestigationTeam
2019– Convener, Thirty-Meter Telescope International Science Definition Team on the Milky Way and Nearby Galaxies
2019 Lead, Bay Area STEM Ecosystem Mentoring Working Group

TEACHING (UCSC)

Quarter/Year	Name	Title of Class	Total Enrollment	Shared Y/N
Fall 1994	Astronomy 297	Independent Study	1	No
Winter 1995	Astronomy 297	Independent Study	1	No
Spring 1995	Astronomy 13	Galaxies, Cosmology & High-Energy Astrophysics	15	Yes
	Astronomy 297	Independent Study	2	No
Fall 1995	Astronomy 2	Overview of the Universe	115	Yes
	Astronomy 297	Independent Study	2	No
Winter 1996	Astronomy 297	Independent Study	2	No
Spring 1996	Astronomy 5	Formation & Evolution of the Universe	35	No
	Astronomy 299	Thesis Research	1	No
	Astronomy 301	Supervised Teaching Experience	1	No
Fall 1996	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Winter 1997	Astronomy 5	Formation & Evolution of the Universe	38	No
	Astronomy 299	Thesis Research	3	No
	Astronomy 301	Supervised Teaching Experience	1	No
Spring 1997	Astronomy 299	Thesis Research	3	No
Summer 1997	Astronomy 299	Thesis Research	1	No
Fall 1997	Astronomy 299	Thesis Research	3	No
Winter 1998	Astronomy 299	Thesis Research	3	No
Spring 1998	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Fall 1998	Astronomy 297	Independent Study	1	No
	Astronomy 297	Independent Study	3	No
Winter 1999	Astronomy 5	Formation & Evolution of the Universe	44	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	3	No
Spring 1999	Astronomy 13	Galaxies, Cosmology & High-Energy Astrophysics	28	No
	Astronomy 297	Independent Study	2	No
	Astronomy 299	Thesis Research	2	No
Fall 1999	Astronomy 297	Independent Study	2	No
	Astronomy 299	Thesis Research	2	No
Winter 2000	Astronomy 297	Independent Study	2	No
	Astronomy 299	Thesis Research	2	No
Spring 2000	Astronomy 13	Galaxies, Cosmology &	29	No

	Astronomy 292	High-Energy Astrophysics Seminar	16	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Summer 2000	Astronomy 299	Thesis Research	1	No
Fall 2000	Astronomy 297	Independent Study	2	No
	Astronomy 299	Thesis Research	2	No
Winter 2001	Astronomy 2	Overview of the Universe	163	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	3	No
	Astronomy 301	Supervised Teaching Experience	2	No
Spring 2001	Astronomy 297	Independent Study	2	No
	Astronomy 299	Thesis Research	2	No
Fall 2001	Astronomy 2	Overview of the Universe	133	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Winter 2002	Astronomy 199	Tutorial	2	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Spring 2002	Astronomy 299	Thesis Research	2	No
Fall 2002	Astronomy 299	Thesis Research	2	No
Winter 2003	Astronomy 299	Thesis Research	2	No
Spring 2003	Astronomy 299	Thesis Research	2	No
Fall 2003	Astronomy 2	Overview of the Universe	157	No
	Astronomy 299	Thesis Research	1	No
Winter 2004	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No
	Physics 199	Tutorial	1	No
Spring 2004	Astronomy 299	Thesis Research	1	No
	Physics 199	Tutorial	1	No
Fall 2004	Astronomy 2	Overview of the Universe	176	No
	Astronomy 297	Independent Study	1	No
Winter 2005	Astronomy 297	Independent Study	3	No
Spring 2005	Astronomy 297	Independent Study	1	No
Fall 2005	Astronomy 2	Overview of the Universe	227	No
Winter 2006	Astronomy 297	Independent Study	2	No
Spring 2006	Physics 199	Tutorial	1	No
	Astronomy 297	Independent Study	2	No
Fall 2006	Astronomy 2	Overview of the Universe	138	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No
Winter 2007	Astronomy 2	Overview of the Universe	127	No
	Astronomy 297	Independent Study	2	No
Spring 2007	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No
	Physics 199	Tutorial	2	No
Fall 2007	Astronomy 297	Independent Study	1	No

	Astronomy 299	Thesis Research	2	No
Winter 2008	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Spring 2008	Astronomy 199	Tutorial	1	No
	Astronomy 299	Thesis Research	3	No
Fall 2008	Astronomy 2	Overview of the Universe	285	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	2	No
Winter 2009	Astronomy 299	Thesis Research	2	No
Spring 2009	Astronomy 299	Thesis Research	2	No
Fall 2009	Astronomy 1	Introduction to the Cosmos	110	No
	Astronomy 299	Thesis Research	1	No
Winter 2010	Astronomy 299	Thesis Research	1	No
Spring 2010	Astronomy 299	Thesis Research	1	No
Fall 2010	Astronomy 1	Introduction to the Cosmos	192	No
	Astronomy 299	Thesis Research	1	No
Winter 2011	Astronomy 299	Thesis Research	1	No
Spring 2011	Astronomy 299	Thesis Research	1	No
Fall 2011	Astronomy 1	Introduction to the Cosmos	193	No
	Astronomy 299	Thesis Research	1	No
Winter 2012	Astronomy 299	Thesis Research	1	No
Spring 2012	Astronomy 299	Thesis Research	1	No
Fall 2012	Astronomy 1	Introduction to the Cosmos	298	No
	Astronomy 299	Thesis Research	1	No
Winter 2013	Astronomy 199	Tutorial	2	No
	Astronomy 299	Thesis Research	1	No
Spring 2013	Astronomy 199	Tutorial	2	No
	Astronomy 299	Thesis Research	1	No
Fall 2013	Astronomy 2	Overview of the Universe	181	No
	Astronomy 299	Thesis Research	1	No
	Astronomy 297	Independent Study	1	No
Winter 2014	Astronomy 299	Thesis Research	1	No
	Astronomy 297	Independent Study	1	No
Spring 2014	Astronomy 299	Thesis Research	1	No
	Astronomy 297	Independent Study	1	No
Fall 2014	Astronomy 1	Introduction to the Cosmos	220	No
	Astronomy 299	Thesis Research	1	No
Winter 2015	Astronomy 299	Thesis Research	1	No
Spring 2015	Astronomy 299	Thesis Research	2	No
Fall 2015	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No
Winter 2016	Astronomy 199	Tutorial	1	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No
Spring 2016	Astronomy 1	Introduction to the Cosmos	242	No
	Astronomy 199	Tutorial	1	No
	Astronomy 297	Independent Study	1	No
	Astronomy 299	Thesis Research	1	No

Fall 2016	Astronomy 1	Introduction to the Cosmos	224	No
	Astronomy 297	Independent Study	1	No
Spring 2017	Astronomy 297	Independent Study	1	No
Fall 2017	Astronomy 1	Introduction to the Cosmos	174	No
	Astronomy 2	Overview of the Universe	135	No
Spring 2018	EART (EPS) 195	Senior Thesis	1	No
	EART (EPS) 199	Tutorial	1	No
Fall 2018	Astronomy 1	Introduction to the Cosmos	222	No
	Astronomy 2	Overview of the Universe	207	No
Winter 2019	Astronomy 297	Independent Study	2	No
Spring 2019	Astronomy 297	Independent Study	8	No
Fall 2019	Astronomy 1	Introduction to the Cosmos	226	No
	Astronomy 292	Seminar	34	No
	Astronomy 297	Independent Study	2	No
Winter 2020	Astronomy 297	Independent Study	2	No
Spring 2020	Astronomy 297	Independent Study	2	No

TEACHING-RELATED ACTIVITIES AND OTHER TEACHING/ADVISING

Teaching Innovation

2004	Prepared to use Classroom Performance System (CPS), an electronic aid for interactive learning geared toward engaging large classes; attended 6 eInstruction training sessions; arranged for a classroom demo before the start of the fall quarter.
2004–2006	Implemented CPS in Fall 2004 Astronomy 2 (Overview of the Universe) in a class with 157 students. Transitioned to CPS RF in Fall 2005. Attended extensive training sessions in summer 2004 and 2005. Successfully used CPS RF in Fall 2005 and 2006 Astronomy 2 in classes with 235 and 145 students, respectively.
2008	Experiment in coordinated team teaching with Rebecca Bernstein of both Astronomy 2 (Overview of the Universe) sections (~ 300 + 140 students), Fall.
2009	Attended special NASA CAE workshop at the AAS Long Beach meeting on active questioning and use of clickers in introductory astronomy classes, January.
2009	Transitioned to a new clicker system (i>clicker) that is better and cheaper for the students, Fall.
2010–2012	Engaged UCSC Education department faculty June Gordon, PhD student Zoe Buck, and CfAO post-doc Tamara Ball in a study of the novel cross-cultural learning opportunities opened up by the "G^3 cubed" project – an international research partnership involving three all-girls high schools: Castilleja School (Palo Alto, CA, USA), Modern High School (Kolkata, India), and Shanghai No. 3 School (China).
2013	Collaborated with Matt Malkan at UCLA on the submission of an online introductory astronomy course proposal to ILTI, Fall.
2017	Mentor for 5 UCSC undergraduate students in Astronomy 9 (Introduction to Research; instructor: Ruth Murray-Clay)
2019	Lead mentor for 4 UCSC undergraduate students in Astronomy 9 (Introduction to Research; instructor: Ruth Murray-Clay)

Substitute Lectures (UCSC)

Quarter/ Year	Name	Title of Class	Number of Lectures	Instructor
1995 Fall	Astronomy 13	Galaxies, Cosmology & High-Energy Astrophysics	2	Zaritsky
	Astronomy 2	Overview of Astronomy	4	Brodie
1998 Winter	Astronomy 2	Overview of Astronomy	2 (1/1)	Jones/Lin
2000 Winter	Astronomy 4	Stars	2	Bolte
2000 Spring	Astronomy 2	Overview of Astronomy	2	Brodie
2004 Fall	Astronomy 4	Stars	2	Bolte
2006 Winter	Astronomy 5	Introduction to Cosmology: Formation & Evolution of the Universe	1	Prochaska
2009 Fall	Astronomy 2	Overview of the Universe	2	Bernstein
2012 Winter	Astronomy 5	Introduction to Cosmology: Formation & Evolution of the Universe	1	Brodie
2012 Winter	Physics 102	Modern Physics	1	Lee (Phys)
2014 Fall	Astronomy 2	Overview of the Universe	1	Rockosi
2017 Winter	Astronomy 5	Introduction to Cosmology: Formation & Evolution of the Universe	1	Robertson

Graduate Students Supervised (UCSC A&A unless otherwise noted; Ph.D. and Masters projects indicated)

1992–1994 John Hibbard, Ph.D. (Columbia U./assisted J. van Gorkom with supervision)
1993–1994 Arpad Szomoru, Ph.D. (U. of Groningen/assisted J. van Gorkom with supervision)
1993–1994 Zsolt Frei, Ph.D. (Princeton U./assisted J. Gunn with supervision)
1994–2000 David Reitzel, Ph.D.
1995–1997 Randi Cohen
1995–1998 Kristine Ing, Ph.D. (Physics)
1996–1997 Zodiac Webster
1996–2001 Anouk Shambrook, Ph.D.
1997–2002 Philip Choi, Ph.D.
1998–2004 Justin Howell, Ph.D. (assisted by J. Brodie and S. Faber)
1999 Ariyeh Maller, Ph.D. (Physics/assisted J. Primack with supervision)
1999–2003 Marla Geha, Ph.D.
2001–2002 Jason Melbourne
2003–2008 Karoline Gilbert, Ph.D.
2004–2009 Evan Kirby, Ph.D.
2004–2011 Kirsten Howley, Ph.D.
2005–2006 Nick Konidaris (assisted D. Koo with supervision)
2006–2008 Jedidah Isler, Masters (joint Fisk/Vanderbilt program/CfAO)
2007–2008 Priya Kollipara
2008–2014 Rachael Beaton, Ph.D. (U. Virginia/assisted S. Majewski with supervision)
2009–2012 Erik Tollerud, Ph.D. (UC Irvine/assisted E. Barton & J. Bullock with supervision)

2009–2013 Valery Rashkov, Ph.D. (assisted P. Madau with supervision)
2009–2015 Claire Dorman, Ph.D.
2010–2011 Anahí Caldu-Primo, Masters (Universidad Nacional Autónoma de Mexico/UCSC)
2010–2012 Lei Yang, Masters (Beijing U./assisted E. Kirby & E. Peng with supervision)
2010–2012 Xiaoting Fu, Masters (Natl. Astron. Obs., Chinese Acad. of Sci./assisted E. Kirby & L. Deng with supervision)
2012–2016 Katherine Hamren, Ph.D. (assisted by C. Rockosi & G. Smith)
2013–2016 Laura Prichard, Masters (Leeds University/Oxford University, UK; assisted by P. Casseli)
2013–2019 Emily Cunningham, Ph.D. (jointly with A. Deason & C. Rockosi)
2014–2015 Biao Li, Ph.D. (Peking U., China; assisted E. Peng & E. Toloba with supervision)
2014–2015 Yiqing Liu (Peking U., China; assisted E. Peng & E. Toloba with supervision)
2016–2017 Namrata Roy
2017– Amanda Quirk, Ph.D.
2017– Kevin McKinnon, Ph.D. (jointly with C. Rockosi)
2018– Miranda Apfel, Ph.D. (jointly with C. Rockosi)
2018–2019 Anwesh Majumder (Presidency U; assisted by R. Chatterjee & S. Chatterjee)
2018– Yuting Feng, Ph.D. (assisted by E. Peng)
2018– Sagnick Mukherjee, M.Sc. (Presidency U/UCSC; assisted by M. Soraisam)
2019– Vivian Tang (assisted by P. Madau)

Post-Doctoral Researchers Supervised (UCSC unless otherwise noted)

1996–1999 Arpad Szomoru
1998–1999 Eva Grebel (co-supervised with D. Zaritsky)
2002–2007 Mark Fardal (U. of Victoria, U. of Massachusetts; co-supervised with A. Babul)
2004–2008 Jasonjot Kalirai (Hubble Fellow)
2009–2011 Kamson Lai (co-supervised with D. Koo & S. Faber)
2011–2015 Elisa Toloba (Fulbright Scholar; co-supervised with J. Simon & E. Peng)
2012–2015 Alis Deason (Hubble Fellow; co-supervised with C. Rockosi)
2018– Monika Soraisam (NOAO)
2020– Adebusola Alabi

Undergraduate Students Supervised (UCSC unless otherwise noted)

1993 Eric Peng (Princeton Univ./Junior Research Project)
1993 Andreas Berlind (Princeton Univ./Junior Research Project)
1994 Randi Cohen (Princeton Univ./Junior Research Project)
1998 Amy Tan (Univ. of California at Davis, McNair Scholar)
1999–2001 Linda Pittroff (Senior Thesis)
2000 Jonathan Warren
2001–2002 Susmita Datta (Senior Thesis)
2003–2004 Dan Gray (Senior Thesis; co-supervised with J. Lotz)
2003–2004 Brian Lemaux (Senior Thesis)
2004–2006 Carynn Luine (Senior Thesis; co-supervised with J. Kalirai & K. Gilbert)
2006 Katharine Fayram (Senior Thesis; co-supervised with N. Konidaris & E. Kirby)

2006 Darwin Fernandez (Hartnell Community College; co-supervised with S. Kassin)
2006 Hannah Sugarman (Wesleyan)
2006 Colin Rognlie
2006–2007 Johnathan Rice (Senior Thesis; co-supervised with J. Kalirai)
2007 Heather Kaluna (Univ. of Hawaii at Hilo/CfAO/co-supervised with D. Rosario)
2007–2008 Basilio Yniguez (Senior Thesis; co-supervised with K. Howley)
2007–2008 Rachael Beaton, Ph.D. (U. Virginia/co-supervised with S. Majewski)
2007–2011 Jennifer Consiglio (Senior Thesis; co-supervised with E. Kirby)
2008–2009 Jody Hannibal
2008–2009 Elizabeth Nordeen
2008–2012 Katherine McCormick (Senior Thesis)
2010 Jessica Johnston
2010–2011 Amanda Ausman
2010–2011 Mykhaylo Shumko (co-supervised with C. Dorman)
2011–2012 Alexander Thelen (Senior Thesis; co-supervised with K. Howley)
2012–2013 Jingjing Chen (Peking University, China; co-supervised with E. Peng)
2012–2013 Laura Prichard (Leeds U. & UCSC; co-supervised with A. Deason & P. Casseli)
2012–2013 Corinne Rushing (Senior Thesis; co-supervised with K. Hamren)
2012–2014 Christopher Powers (Senior Thesis; co-supervised with C. Dorman)
2014–2015 Lena Eiger (Harvey Mudd College)
2014–2016 Kathryn Plant (Senior Thesis; co-supervised with B. Margon)
2014–2016 José Torres Hernandez (Senior Thesis)
2015 Sophia Sholtz (co-supervised with E. Toloba)
2015 Maksym Zhelyeznyakov (Texas Tech University; co-supervised with E. Toloba)
2016 Jon Hays (Cabrillo College/LAMAT intern)
2016–2018 Madison Harris (Senior Thesis; co-supervised with E. Cunningham)
2016–2017 Hyerin Jang
2016–2017 Hao Zhang (Peking U./visiting student at UCSC; co-supervised with E. Peng)
2017–2018 Yvonne Ajwa
2017– Brandon Cavins
2017–2018 Yuting Feng (Peking U./visiting student at UCSC; co-supervised with E. Peng)
2017–2020 Caelum Rodriguez (Senior Thesis)
2017–2018 Nihaal Zaveri
2017–2019 Yunhao Zhang (Peking U./visiting student at UCSC; co-supervised with E. Peng)
2017–2019 Ryan Dudschus (Senior Thesis)
2017 Pablo Sevilla (Senior Thesis; co-supervised with A. Quirk)
2018 Aliona Kosobokova (Karazin Kharkiv National University, Ukraine)
2018– Rachel Raikar (Senior Thesis)
2018– Ricardo Flores (San Francisco State University/Cal-Bridge North)
2018– Kadri Mohamad Nizam (University of the Pacific/co-supervised with E. Toloba)
2018– Katie Christensen (University of the Pacific/co-supervised with E. Toloba)
2018– Spencer Jaseph (co-supervised with A. Quirk)
2019– Camila Aristimuno (co-supervised with A. Quirk)
2019– Jiamu Huang (co-supervised with K. McKinnon)
2019– Tim Marquez (co-supervised with S. Mukherjee & M. Soraisam)
2019– Amishi Sanghi (co-supervised with A. Quirk)
2019– Justin Barber (University of the Pacific/co-supervised with E. Toloba)
2019– Lilly Bralts-Kelly (Macalester College)

2019– Alysha Choudhary (UC Irvine; co-supervised with S. Mukherjee)
2019– Josh Dey (Reed College)
2019– Jared Geiselhart (Foothill College; co-supervised with Y. Feng)
2019– Jack Lonergan (University of the Pacific/co-supervised with G. Barro)
2019– Kimberly Long (Foothill College; co-supervised with S. Mukherjee)
2019– Rafael Nuñez (co-supervised with M. Soraisam & Kevin McKinnon)
2019– Sopnil Rahman (co-supervised with S. Mukherjee)
2019– Collin O'Connor
2019– Charity Wei (co-supervised with K. McKinnon)
2019– Stephanie Figuereo (co-supervised with S. Mukherjee & M. Soraisam)
2020– Jack Kutcka (co-supervised with K. McKinnon)
2020– Paulina Garcia (U. of Houston; co-supervised with M. Apfel)
2020– Dawson Lang (Colorado School of Mines; co-supervised with Y. Feng)
2020– Tiffani Madison (CSU Sacramento; co-supervised with S. Mukherjee)
2020– Kevin Maruli (Foothill College)
2020– Torin Rose (U. of Texas Arlington)
2020– Yaritza Villa (Mount St. Mary's College; co-supervised with Y. Feng)

High School Students Supervised

2009 Namrata Anand, Kevin Zhang, Andrew Zhou (Harker)
[co-supervisor: E. Kirby]
2010 Annie Cardinal, Nina Jansen, Claudia Kelley, and Teresa Krause (Castilleja); Benjamin Chen and Michelle Deng (Harker); Jenny Hong (Palo Alto); Anirudh Suvarna (Monta Vista)
[co-supervisors: C. Dorman, K. Howley, E. Kirby, K. McCormick, and V. Rashkov]
2011 Aurora Alvarez-Buylla (Balboa); Lucy Cheng and Ashvin Swaminathan (Harker); Abrar Choudhury (Bellarmine); Victoria Dean, Nina Jansen, and Teresa Krause (Castilleja); Sumedh Guha (Archbishop Mitty); Anirudh Suvarna (Monta Vista)
[co-supervisors: A. Caldu-Primo, C. Dorman, E. Kirby, K. McCormick, and V. Rashkov]
2012 Lucy Cheng, Zareen Choudhury, Michelle Deng, Andrew Luo, Varun Mohan, and Andrew Zhang (Harker); Victoria Dean, Caroline Debs, and Teresa Krause (Castilleja); Aurora Alvarez-Buylla (Balboa); Claire Grishaw-Jones (Santa Cruz); Sumedh Guha (Archbishop Mitty); Michelle Guo (Irvington); Tara Iyer (Evergreen Valley); Paras Jain (Monta Vista); Sanika Kulkarni (Presentation); Debnil Sur (Bellarmine); Leda Woloshyn (Latymer)
[co-supervisors: C. Dorman, K. Hamren, K. Howley, E. Kirby, K. McCormick, A. Thelen, P. Thorman, and E. Toloba]
2013 Stephanie Chen, Zareen Choudhury, Avinash Nayak, Shreyas Parthasarathy, Samyukta Yagati, and Andrew Zhang (Harker); Caroline Debs and Lea Sparkman (Castilleja); Anneliese Gallagher and Mary Liu (Los Altos); Shazia Babul (Sentinel, Vancouver); Matthew Chang (Mountain View); Amy Cohn (Park Tudor, Indiana); Claire Grishaw-Jones (Santa Cruz); Michelle Guo (Irvington); Neel Ramachandran (St Francis); Sony Theakanath (Bellarmine)
[co-supervisors: A. Deason, C. Dorman, K. Hamren, E. Kirby, P. Thorman, and E. Toloba]

2014 Caroline Chang (Ardenwood Home School); Jane Choi and Lea Sparkman (Castilleja); Jason Chu, Alice Wu, and Andrew Zhang (Harker); Anjali Ganguly (Evergreen Valley); Michelle Guo and Rachel Guo (Irvington); Jerry Hong (Palo Alto); Anjini Karthik (St. Francis); Ajinkya Nene (Lynbrook); Nikita Vemuri (Archbishop Mitty)
[co-supervisors: K. Hamren, E. Kirby, E. Toloba, and E. Velasquez]

2015 Lea Sparkman (Castilleja); Maggie Wang (Gunn); Jimmy Lin (Harker); Rachel Guo (Irvington); Arin Mukherjee (Lawrenceville); Shruti Keoliya (Modern High School, Kolkata, India)
[co-supervisors: E. Cunningham and E. Toloba]

2016 Jerry Chen and Connie Miao (Harker); Gabriel Damon (Santa Cruz); Anita Ilango and Megha Ilango (Cupertino); Sharvani Jha and Rena Zhong (BASIS Independent Silicon Valley; COSMOS follow up); Anika Kamath (Crystal Springs); Arushi Sahai (Menlo); Alyssa Sales and Atmika Sarukkai (Castilleja); Andrew Shao (Lynbrook); Justin Xie (Harker)
[co-supervisors: E. Cunningham, E. Kirby, L. Prichard, E. Toloba, and J. Torres]

2017 Quetzal Carter-Oropeza (Leadership); Ishani Cheshire and Jin Tuan (Harker); Atirath Dhara (W. Windsor-Plainsboro); Nandita Gupta (Gunn); Claire Lacoume and Adhara Martellini (Lycée Intl. de Valbonne); Teddy Liang (Menlo); Tiffany Louie (LA County HS for the Arts); Kaela McConnell (Providence Day); Celia Ramirez (Watsonville), Atmika Sarukkai (Castilleja); Andrew Shao (Lynbrook); Kovid Tallam (St. Francis); Jurij Waite (Nelson Mandela Intl.)
[co-supervisors: G. Barro, E. Cunningham, E. Peng, N. Roy, and E. Toloba]

2018 Praneet Bhoj (Monta Vista); Gautam Chawla (Princeton); Ishani Cheshire, Andrew Lu, Arya Maheshwari, Jin Tuan, and Gene Wang (Harker); Alyssa Dhalla (Crystal Springs); Andrew Harris (Pacific Coll.); Christa Huang, Jeffrey Munsell, and Sabahat Sami (Bronx); Tanshi Jain (St. Francis); Arnav Krishnamoorthi (Enoch); Vivian Liu and Arushi Sahai (Menlo); Ruchi Maheshwari (Saratoga); Alexandra Masegian (Branham); Brianna McColm (Westmont); Aramis Mendoza (Castilleja); Rishi Sankar (Gunn)
[co-supervisors: E. Cunningham, M. De Leo-Winkler, R. Dudschus, M. Harris, A. Kamath, Y. Ko, K. McKinnon, E. Peng, R. Raikar, V. Sahai, and L. Sales]

2019 Mahir Arora (Brentwood); Ariel Bachman (BASIS Independent Silicon Valley); Antara Bhattacharya (Navy Children, Mumbai, India); Allison Chang (Palo Alto); Juan Pablo Chavez, Humberto Salazar, and Ezra (Sofia) Soto (Watsonville); Gautam Chawla (Princeton); Gianna Gollotti (Los Gatos); Justin Du (Cupertino); Jeremy Ha (San Dieguito); Christa Huang, Jeffrey Munsell, and Sabahat Sami (Bronx); William Huang and Riya Shrivastava (Lynbrook); Suhas Kotha (Evergreen Valley); Arnav Krishnamoorthi (Enoch); Arya Maheshwari, Jin Tuan, and Emily Zhou (Harker); Arjun Padiyar (Irvington); Brian Perez-Wences (East Palo Alto); Mariana Reyes (Colegio Bolivar); Manik Taneja (Monta Vista)
[co-supervisors: J. Barber, Y. Feng, A. Quirk, J. Lonergan, S. Mukherjee, K. Nizam, E. Peng, R. Raikar, and V. Tang]

Non-UCSC Teaching/Advising

1980 La Martinière School, Calcutta, India. Substitute teacher for 1 month, approx. 200 students in 5 classrooms. English, Math and Physics, grades 6–10, September.

1989	Rider College, Lawrenceville, NJ. Substitute teacher for 1 week, approx. 100 freshmen/sophomore students. Introductory Astronomy, Instructor: Pat Boeshaar, October.
1995	Ralph E. Noddin Middle School, Capitola, CA. Lectures & demos, approx. 30 students, grade 6. Project ASTRO partner: Catherine Gunderson, July.
1996	Pacific Union College, Angwin, CA. Science enrichment lecture for approx. 50 college students. "Galaxy Evolution," November.
1996–2001	E.A. Hall Middle School, Watsonville, CA. 2–3 lectures & demos per year over a 5-year period, approx. 20 students per lecture, grades 6–7. Project ASTRO partner: Shoshana Coplan.
1997	Alta Vista Elementary School, Los Gatos, CA. 2 annual Science Day presentations. 6 lectures & demos to a total of approx. 200 students, grades K–5.
1999	Center for Astronomical Research in Antarctica Space Explorers' Program, visit to UCSC, Santa Cruz, CA. Coordinator: Randall Landsberg. Lecture & demos, approx. 25 Chicago area inner city high school students, July.
1999	Alta Vista Elementary School, Los Gatos, CA. 2 annual Science Day presentations. 6 lectures & demos to a total of approx. 200 students, grades K–5.
2000	Watsonville Elementary School, Watsonville, CA. Lectures & demos, 20 students, grades 3–5, March.
2000	UCSC, Santa Cruz, CA. Discovery Lecture (with Sandra Faber). Approx. 300 high school students, "Studying the Formation of Galaxies," June.
2000	UCSC, Santa Cruz, CA. Dessert Talk and Lick Shop Tour (with Sandra Faber). Six COSMOS high school students, "The DEIMOS Spectrograph," June.
2000	UCSC, Santa Cruz, CA. Organized and coordinated CfAO participation in the Summer Youth Leadership Conference and Science Academy, 6 two-day sessions of lectures and astronomical observations, approximately 600 students from rural areas. Program director: Ed Aguilar, May–August.
2000	UCSC, Santa Cruz, CA. Spoke to a dozen high school students in the Center for Talented Youth, "Telescopes as Time Machines," November.
2000–2001	UCSC, Santa Cruz, CA. Kids Around the University (KATU) Program, 5 sessions over a 2-year period, 25 elementary and middle school students per session, grades 4–7. Directors: Bliss Kern, Nick Ellis.
2000–2001	Good Samaritan Hospital Child Care Center, San Jose CA. 3 presentations per year over a 2-year period, approx. 20 students per presentation, ages 2–4 years.
2001	Loma Prieta Independent Home Study, Summit, CA. Teacher: Catherine Gunderson. Solar system demo and galaxy slides for 10 middle school students, May.
2001	UCSC, Santa Cruz, CA. COSMOS CfAO cluster 10, Stars, Sight, and Science, taught and developed curriculum with Sasha Hinkley, UCSC physics graduate student. 2 lecture sessions, 15 high school students, June.
2001	Discovery Lecture at UCSC (with Sandra Faber). Approx. 300 high school students, "The Birth and Evolution of Galaxies: Time Machines, Cannibalism and Chemical Pollution," June.
2001–2002	Renaissance High School, Watsonville, CA. Project ASTRO partner: Shoshana Coplan. 2–3 lectures & demos per year, approx. 15 students per lecture, grades 9–12.

2002 Pacific Union College, Angwin, CA. Science enrichment lecture for approx. 50 college students, "Birth and Evolution of Galaxies: Time Machines, Cannibalism and Chemical Pollution," January.

2002 Lick Observatory, Mount Hamilton, CA. Guided tour and recruitment for CfAO's "Stars, Sight and Science 2002," 15 students from Renaissance High School, Watsonville, CA, March.

2002 Discovery Lecture at UCSC (with Sandra Faber). Approx. 200 high school students, "Galaxies, Time, and Light," July.

2002–2003 Stratford School, Los Gatos, CA. 3 presentations per year, approx. 50 students per presentation, grades PS–K.

2003 Discovery Lecture at UCSC (with Sandra Faber). Approx. 200 high school students, "The Milky Way, Schroedinger's Cat, and You," July.

2003 Loma Prieta Independent Home Study, Summit, CA. Teacher: Catherine Gunderson. Two groups of middle school students, totalling about 20. Two cosmology presentations and question/answer sessions, September.

2004 Modern High School for Girls, Kolkata, India. Approx. 250 students in grades 10, 11 and 12, three lectures, "The Milky Way, Schroedinger's Cat, and You," July.

2004 Redwood Middle School, Saratoga, CA. Six 45-minute astronomy presentations followed by question/answer and discussion sessions for 8th grade students and judging of science essays, total of 153 students. Teacher: Martin K. Belles, December.

2005 Renaissance High School, Watsonville, CA. Project ASTRO partner: Shoshana Coplan. 2–3 lectures & demos per year, approx. 15 students per lecture, grades 9–12.

2005 La Martinière for Girls, Kolkata, India. Special lecture, about 150 Science Club members from grades 8 to 10. Coordinator: Ms. Mathew. "The Milky Way, Schroedinger's Cat, and You," August.

2005 Loreto House, Kolkata, India. Special lecture, about 250 girls from grades 11 and 12 science sections. Coordinator: Ms. Gilla. "The Milky Way, Schroedinger's Cat, and You," July.

2005 UCSC, Santa Cruz, CA. Discovery lecture, about 200 students from COSMOS and JHU/CTY programs. Coordinator: Frank Bauerle. "The Milky Way, Schroedinger's Cat, and You," July.

2005 Saratoga High School Career Day Saratoga, CA. Astronomy presentation, total of 20 students. Coordinator: Karen Azzi, March.

2006 UCSC, Santa Cruz, CA. Discovery lecture, about 200 students from COSMOS and JHU/CTY programs. Coordinator: Nafeesa Owen. "A Journey Back to the Big Bang," July.

2007 Stratford School, Los Gatos, CA. Lecture, about 40 3rd grade students. Coordinator: Sherry Paregian, principal. "A Journey Back to the Big Bang," April.

2007 Georgiana Bruce Kirby Preparatory School, Santa Cruz, CA. Four lectures (with Karoline Gilbert), about 75 8th-12th grade students. Science intensive program coordinator: Lise Whitfield. Various topics including: "Journey Back to the Big Bang," "Telescopes as Time Machines," "Galaxy Cannibalism," and "Adaptive Optics," May.

2007 UCSC, Santa Cruz, CA. Lecture at SCIPP Quarknet teachers workshop, about 15 high school teachers and students. Coordinator: Hartmut Sadrozynski. "A Journey Back to the Big Bang," June.

2007 UCSC, Santa Cruz, CA. Discovery lecture (with Sandra Faber), about 200 students from COSMOS and JHU/CTY programs. Coordinator: Nafeesa Owen. "A Journey Back to the Big Bang," August.

2007 Modern High School, Kolkata, India. Guest lecture, about 100 girls from two Grade 12 science sections). Coordinator: Devi Kar (principal). "A Journey Back to the Big Bang," December.

2007 Stratford School, Los Gatos, CA. Lecture and demonstration, 45 4th grade students. Coordinator: Tekla Petrinovich, "Our Solar System, the Milky Way galaxy, and Black Holes," October.

2007 Hartnell College, Salinas, CA. Two lectures, 50 students (total), astronomy class and Physics Club. Coordinator: Dr. Pimol Moth. "Journey Back to the Big Bang" and "Black Holes, Adaptive Optics, and Time Machines," November.

2008 UCSC, Santa Cruz, CA. Four-week course plus planning and curriculum design over the Winter & Spring terms — "COSMOS Cluster 7 Astronomy" (with Karoline Gilbert), 18 high school students and 1 high school teacher. Coordinator: Amy Stucky, June–July.

2008 UCSC, Santa Cruz, CA. Discovery Lecture (with Sandra Faber), about 200 students from COSMOS and other summer programs. Coordinator: Amy Stucky, "A Journey Back to the Big Bang," June.

2008 Monroe Middle School, San Jose, CA. Shadowed for a day by Cody Contreras, 8th grade student, March.

2008 XXth IAC (Instituto de Astrofisica de Canarias). Winter School (two-week course, five one-hour lectures), 60 graduate students and postdocs. "The SPLASH Survey and Progressive Stages of Hierarchical Galaxy Formation," November.

2009 Project for Inmate Education: Algebra course for inmates at Santa Cruz County Jail. Coordinators: Mark Krumholz and M'Liss Keesling, May–June.

2009 UCSC, Santa Cruz, CA. Four-week course plus planning and curriculum design over the Winter & Spring terms — "COSMOS Cluster 7 Astronomy," 18 high school students and 1 high school teacher. Coordinator: Amy Stucky, June–July.

2009 UCSC, Santa Cruz, CA. Discovery Lecture (with Sandra Faber), about 200 students from COSMOS and other summer programs. Coordinator: Amy Stucky; "Our Place in the Cosmos," July.

2009 La Martinière School for Boys, Kolkata, India. Guest lecture, about 80 boys from grades 11 and 12 science sections. Coordinator: Sunirmal Chakravarthi (principal), "Our Place in the Cosmos," August.

2009 Los Gatos, CA. Interviewed by Erica Meier, 6th grade student from Pleasanton Middle School, for a project on black holes, April.

2009 International School of the Peninsula, Palo Alto, CA. Lecture to 20 7th grade students. Coordinator: Amy Fontarensky, June.

2009 The Harker School, San Jose, CA. Set up summer research internship program for three high school students— Namrata Anand, Kevin Zhang, Andrew Zhou (all rising seniors)— who worked on SPLASH-related research projects. Coordinated with: Anita Chetty (Harker Science Dept Chair), May–August. Siemens: two semifinalists; Intel STS: three semifinalists and one finalist (all in astronomy).

2009 Modern High School, Kolkata, India. Two guest lectures, one to about 80 girls from grades 11 and 12 science sections; one to about 160 girls from grade 10). Coordinator: Devi Kar (principal), "Our Place in the Cosmos," August.

2009–2012 Stratford School, San Jose, CA. Mentored an elementary-school (2nd grade in 2009–2010) student, Rakesh Peddibhotla.

2010 UCSC, Santa Cruz, CA. 4-week course plus planning and curriculum design over the Winter & Spring terms—"COSMOS Cluster 7 Astronomy" (co-instructor: Sarah Hansen), 18 high school students and 1 high school teacher. Coordinator: Amy Stucky, January–June.

2010 UCSC, Santa Cruz, CA. Hosted Astronomy Night with lecture for Harker Women in Science, Technology, Engineering and Math (WiSTEM) group, 13 students and 2 teachers, including a visit to the Lick instrument shops (host: Dave Cowley), "Our Place in the Cosmos," February.

2010 The Harker School, San Jose, CA; Castilleja School, Palo Alto, CA; Monta Vista High School, Cupertino, CA; Palo Alto High School, Palo Alto, CA. Expanded high school summer research internship program to include astronomy, instrumentation, high-energy physics (SCIPP), and chemistry faculty at UCSC, and astronomy postdocs, graduate students, and undergraduates; expanded the set of schools, 15 high school students (rising sophomores to rising seniors) participated, including 3 on DEEP and 7 on nearby galaxy research projects (preparatory work started in January). Coordinated with: Anita Chetty (Harker Science Dept Chair) and Doris Mourad (Castilleja Research Internships), February–June.

2010 Galt High School, Galt, CA. Shadowed for a day by Chelsea Purcell, 12th grade student, March.

2010 Expanded high school science internship program (SIP) to include research projects in astronomy, instrumentation, and chemistry mentored by UCSC faculty, postdocs, graduate students, and undergraduates and expanded the set of schools to The Harker School (San Jose), Castilleja School (Palo Alto), Monta Vista High School (Cupertino), and Palo Alto High School (Palo Alto); 15 high school students (rising sophomores to rising seniors) participated, including 3 on DEEP and 7 on nearby galaxy research projects/coordinated with: Anita Chetty (Harker), Doris Mourad (Castilleja), May–August (prep work started in January). Siemens: two semifinalists; Intel STS: four semifinalists and two finalists (in astronomy, chemistry, and instrumentation).

2010 Discovery Lecture (with Sandra Faber) at UCSC, Santa Cruz, CA (about 200 students from COSMOS and other summer programs)/coordinator: Amy Stucky; "Galaxies and Our Place in the Cosmos," July.

2010 Project for Inmate Education: Was one of two instructors for algebra course (Math 2) for Santa Cruz County Jail inmates – offered through UCSC extension; coordinator: Mark Krumholz, July–September.

2010 Guest lecture at Modern High School, Kolkata, India; about 40 girls from the grade 11 science section/coordinator: Devi Kar (principal); "Our Place in the Cosmos," August.

2010 Guest lecture at La Martiniere School for Boys, Kolkata, India; about 40 boys from the grade 12 science section/coordinator: Sunirmal Chakravarthi (principal); "Our Place in the Cosmos," August.

2010–2012 Mentored a 9th-grade student Akanksha Chattopadhyay, Modern High School, Kolkata, India.

2010 Advised UCSC freshman Autumn Becerra for her research paper on the effects of light pollution, October.

2010 Advised UCSC freshman Jessica Huynh for her research paper on the effects of light pollution, November.

2010 Modern High School (Kolkata, India) visit to meet with team of students and teachers and to video skype with Castilleja staff for "G^3 project," December.

2011 Expanded high school science internship program (SIP) to include astronomy/astrophysics, astronomical instrumentation, physics, chemistry, biomedical engineering, and marine sciences. Expanded the set of schools to The Harker School (San Jose), Castilleja School (Palo Alto), Monta Vista High School (Cupertino), Balboa High School (San Francisco), Bellarmine College Preparatory (San Jose) and Archbishop Mitty High School (San Jose). A total of 29 high school students (rising sophomores to rising seniors) participated, including 1 on DEEP, 3 on exoplanets, and 9 on nearby galaxy research projects/ coordinated with: Anita Chetty (Harker), Christy Story (Castilleja); May-August (preparatory work started in October 2010 and the work continued through August 2011). Siemens: three semifinalists (+ one SIP alumna) and two regional finalists; Intel STS: four semifinalists (+ one SIP alumna) (in astronomy and chemistry).

2010–2011 Worked with Gordon Ringold, Director, UCSC Silicon Valley Initiative and his assistant Joanne Yamaguma on expansion of the high school science internship program (SIP), campus housing for SIP students, and SIP-related development efforts; explored idea of joint Castilleja-Harker speaker series for UCSC researchers in STEM areas of excellence (October 2010–August 2011).

2011 Shadowed for a day and interviewed by Zack Newland, 12th grade student, Harbor High School, Santa Cruz, CA; January.

2011 Project for Inmate Education: Was one of two instructors for algebra course (Math 2) for Santa Cruz County Jail inmates – offered through UCSC extension; coordinator: Mark Krumholz, February–June.

2011 Astronomy instructor for COSMOS Cluster 7 Astronomy, a 4-week course at UCSC, Santa Cruz, CA (20 high school students + 1 high school teacher)/co-instructor: Sarah Hansen; coordinator: Jennifer Rolen; June/July (plus planning and curriculum design over the preceding Winter & Spring terms).

2011 Discovery Lecture (with Sandra Faber) at UCSC, Santa Cruz, CA (about 200 students from COSMOS and other summer programs)/coordinator: Yvette Nava; "Our Place in the Cosmos: Astrology, Gastronomy, and Cosmetology," July.

2011 Project for Inmate Education: Was one of two instructors for algebra course (Math 2) for Santa Cruz County Jail inmates – offered through UCSC extension; coordinator: Mark Krumholz, September–December.

2012 Expanded high school science internship program (SIP) to include 43 students from 20 schools, including a school in Oregon and one in Moscow, Russia. The subjects covered included astronomy/astrophysics, astronomical instrumentation, physics, biomolecular engineering, computer engineering, electrical engineering, oceanography, and microbiology and environmental toxicology/coordinated with: Anita Chetty (Harker), Stacey Kertsman (Castilleja); January–August. Siemens: seven semifinalists (+ one SIP alumna) and two regional finalists (+ two SIP alumni); Intel STS: four semifinalists (+ two SIP alumni) (in astronomy, physics, and chemistry).

2012 Mentored an 8th grade student, Narun Raman, Keys School, Palo Alto, on a special relativity project; March.

2012 Question/answer session for 270 3rd-grade students at Warm Springs Elementary School, Fremont, CA; coordinator: Clyde Mann; March.

2012 Modern High School (Kolkata, India) visit to meet with team of students and teachers for an interactive session on "Scale of the Universe" and to set up collaboration with SIP/COSMOS students at UCSC, May.

2012 UCSC, Santa Cruz, CA. Four-week course plus planning and curriculum design over the Winter & Spring terms — "COSMOS Cluster 7 Astronomy," 20 high school students and 1 high school teacher. Coordinator: Raul Ebio, July–August.

2012 Discovery Lecture at UCSC, Santa Cruz, CA (~200 students from COSMOS and other summer programs)/coordinator: Raul Ebio; "Mergers and Acquisitions: The Lives and Times of Galaxies," July.

2012 Gave invited public lecture to students of China West Normal University, Nanchong, China (about 400 students); "Our Place in the Cosmos," May.

2012 Helped coordinate participation of SIP mentors and mentors from UCSC's Women in Science and Engineering (WiSE) group in the More Active Girls in Computing (MAGIC) program founded by SIP parent Ira Pramanick of Google; built on partnership between WiSE and Watsonville High School (coordinator: Don Brown); March–September.

2012 Modern High School (Kolkata, India) visit to meet with students from classes X and XI and teachers for an interactive session on "The Andromeda Project," a citizen science project, and to set up collaboration with SIP/COSMOS students at UCSC, November.

2013 Expanded high school science internship program (SIP) to include 61 students.

2013 UCSC, Santa Cruz, CA. 4-week course plus planning and curriculum design over the Winter & Spring terms—"COSMOS Cluster 7 Astronomy," 25 high school students and 1 high school teacher. Coordinator: Raul Ebio, July–August.

2013 Discovery Lecture at UCSC to ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "Are Galaxies Island Universes?" July.

2014 Expanded high school science internship program (SIP) to include 68 students from 28 schools (17 public, 11 private); new website launched; paperless application portal launched.

2014 Interviewed by Amelia Spencer, 11th grade student from East Paulding High School, Dallas, GA, about a career in astrophysics, May.

2014 Interviewed by Jack Hanke, a high school student from Texas, about a career in astrophysics, May.

2014 UCSC, Santa Cruz, CA. Four-week course plus planning and curriculum design over the Winter & Spring terms — "COSMOS Cluster 7 Astronomy," 25 highschool students and 1 high school teacher. Coordinator: Raul Ebio, July–August.

2014 Discovery Lecture at UCSC for ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "Are Galaxies Island Universes?" July.

2014 Special lecture for 20 middle-school students in the i2 camp at Castilleja School/coordinator: Jon Rockman; "Cosmic Chemistry, Star-forming Nebulae, Galaxy Collisions, and Black Holes," July.

2014 Special lecture for 15 middle-school students in Starlab, the Modern High School for Girls (Kolkata, India) astronomy club/coordinator: Pamela Datta; "Cosmic Chemistry, Star-forming Nebulae, Galaxy Collisions, and Black Holes," August.

2014 Lecture at Fremont Lecture Series for about 100 students, parents, and teachers, Fremont High School, Mountain View, CA; "We Are Stardust," September.

2014 Project for Inmate Education: One of two faculty instructors/graders for pre-algebra course for Santa Cruz County Jail inmates; coordinator: Mark Krumholz, October–December.

2014 Lecture for the Harker School Astronomy Club, San Jose, CA; "We Are Stardust," October.

2014 Lecture for the Watsonville High School Chemistry Club, Watsonville, CA about research opportunities for high school students: the COSMOS, SIP, and MAGIC programs at UCSC, October.

2014 Science Speakers Club lecture for students at the Stanford University Online High School/coordinator: Tanmay Khattar; "We Are Stardust" (and an introduction to the UCSC SIP program), November.

2014 Lecture for the Bellarmine College Prep STEM-Med Club, San Jose, CA; "The Universe of Galaxies" (and an introduction to the UCSC SIP program), November.

2014 Interviewed by Teresa Krause (Northeastern University undergraduate; former SIP intern) about mentoring, December.

2015 Lecture for students at Crystal Springs Uplands School, Hillsborough, CA; "The Universe of Galaxies" (and an introduction to the UCSC SIP program), February.

2015 Lecture for students in the "Think About Tomorrow" club at Henry M. Gunn High School, Palo Alto, CA; "UCSC's Science Internship Program," March.

2015 Expanded high school science internship program (SIP) to include 104 students; paperless mentor portal and application rating system added.

2015 Discovery Lecture at UCSC for ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "We Are Stardust," July.

2015 Special lecture for 20 middle-school students in the i2 camp at Castilleja School/coordinator: Jon Rockman; "Magic of the Universe," July.

2015 Project for Inmate Education: One of two faculty instructors/graders for pre-algebra course for Santa Cruz County Jail inmates; coordinator: Mark Krumholz, October–December.

2015 Presented at "Exploring Careers!" event at Monta Vista High School, Cupertino, CA; conducted three sessions for ~30 students each; November.

2016 Lecture for the STEMx club at Castilleja School, Palo Alto, CA; "The Recent Detection of Gravitational Waves from a Pair of Merging Black Holes," March.

2016 Expanded high school science internship program (SIP) to include 142 students; new bus system added.

2016 Discovery Lecture at UCSC for ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "We Are Stardust," July.

2016 Lecture at UCSC for 15 9^{th}–10^{th} grade students from Johns Hopkins U. Center for Talented Youth; "Galaxies: Building Blocks of the Universe," July.

2016 Project for Inmate Education: Was one of seven instructors/graders for pre-algebra course for Santa Cruz County Jail inmates; coordinators: Tiffany Hsyu and Kat Feng, October–December.

2016 Lecture for ~50 high school students at St. Francis High School, Mountain View, CA; "My Career Path, Research on Galaxies, and SIP," November.

2016 Lecture for ~40 high school students at Lynbrook High School, San Jose, CA; "My Career Path, Research on Galaxies, and SIP," December.

2016 Lecture for ~20 high school students at Archbishop Mitty High School, San Jose View, CA; "The Universe of Galaxies and STEM Research Opportunities for Young People," December.

2017 Project for Inmate Education: One of two faculty instructors/graders for pre-algebra course for Santa Cruz County Jail inmates; coordinators: Tiffany Hsyu and Kat Feng, January–April.

2017 Interviewed by Angad Sandal, 5th grade student from Queens, NY, about a career in astrophysics, February.

2017 Lecture for ~40 high school students at Lynbrook High School, San Jose, CA; "The Story of the Milky Way: Our Place in the Cosmos," March.

2017 Expanded high school science internship program (SIP) to include 157 students; greatly increased diversity of student pool; new south shuttle bus system added.

2017 Discovery Lecture at UCSC for ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "We Are Stardust: Galaxies as Building Blocks of the Universe," July.

2017 Shadowed for two days by Eesh Naik, rising 11th grade student, Lynbrook High School, San Jose, CA; June and August.

2017 Guest lecture on Andromeda and computer programming tutorial for ~15 students in the Stanford Online High School/coordinator: Kalee Tock; "Python Astrophysics Tutorial: Unraveling the History of the Andromeda Galaxy," August.

2017 Lecture for the Astrophysics club at Castilleja School, Palo Alto, CA; "Black Holes, Gravitational Lensing, and Gravitational Waves from Merging Black Holes," October.

2017 Interviewed by Verenise Martinez, UCSC student, about a major and career in astrophysics, November.

2017 Shadowed for a day by Harshita Mattapalli, 11th grade student, Monta Vista High School, Cupertino, CA; November.

2017–2018 Two computer programming tutorials for 5 underresourced physics/astrophysics majors in the Cal-Bridge North program/coordinator: Aaron Romanowsky; venues: UC Berkeley and San Jose State Univ.; "Python Astrophysics Tutorial: Unraveling the History of the Andromeda Galaxy," November (2017) and February (2018).

2018 Lecture for ~40 high school astrophysics club students at Lynbrook High School, San Jose, CA; "First Detection of Gravitational Waves," February.

2018 Talk/discussion for Stanford Online High School students (segment of their astronomy-themed California tour), Stanford, CA; March.

2018 Interviewed by Imogen Searle, 10th grade student from San Ramon Valley High School, about what events in one's life have contributed to their success, April.

2018 Advised Alisha Choudhary (high school senior, soon to be entering freshman at UC Irvine) about astronomy major; April.

2018 Advised Joy Swanberg (high school senior, soon to be entering freshman at UCSC) about astronomy major; April.

2018 Feedback on talks and tips on technical writing and talks, Stanford Online High School students (online); May.

2018 Advised high school junior Amanda Grace-Smith about astronomy careers; May.

2018 Special lecture for ~50 middle school students and their mentors at Youth Science Camp, Višnjan, Croatia; "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes," July.

2018 Discovery Lecture at UCSC for ~200 high school students from COSMOS, SIP and other summer programs/coordinator: Raul Ebio; "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes," July.

2018 Special lecture for 20 middle-school students in the i2 camp at Castilleja School/coordinator: Jon Rockman; "The Milky Way and Andromeda Galaxies and their Impending Collision," July.

2018 Advised Avi Patel (rising high school senior, Los Gatos High School) about physics major; August.

2018 Special lecture for ~40 high school students and their mentors at the Višnjan School of Astronomy, Višnjan, Croatia; "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes," August.

2018 Math tutoring session, art display, and fundraiser for ~100 homeless/orphan elementary through high school girls at Khushi Rainbow Home, Okhla, New Delhi, India/coordinators: Amitabha & Chhaya Basu; August.

2018 Guest lecture "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes" to ~20 Physics Society undergraduates at Ashoka University, Sonipat, India; September.

2018 Guest lecture "Galaxies, Dark Matter, Cannibalism, Gravitational Waves, and Black Holes" and physics and astronomy career advice to undergraduates at University of the Pacific, Stockton, CA; September.

2018–2020 Seven offerings of the Python and Research (PyaR) computer programming tutorial for ~300 students (high school through graduate students) in several countries in Africa, Asia, Europe, and North/South/Central America; November–June.

2019 Special lecture for ~35 girls in Class XI of Modern High School for Girls, Kolkata, India/coordinator: Devi Kar; "Galaxies: Dark Matter, Cannibalism, and the Periodic Table of Elements," January.

2019 Special lecture for ~65 students of St. Xavier's College, Kolkata, India/coordinator: Subhankar Ghosh; "Galaxies: Dark Matter, Cannibalism, Black Holes, Gravitational Waves, and the Periodic Table of Elements," January.

2019 Two computer programming tutorials for 13 underresourced physics/astrophysics majors in the Cal-Bridge North program/coordinator: Aaron Romanowsky; venues: UC Berkeley and San Jose State Univ.; "Python Astrophysics Tutorial: Unraveling the History of the Andromeda Galaxy," January/February.

2019 Special lecture for ~200 students/parents at Lynbrook High School (San José, CA) STEM day; "Galaxies: Dark Matter, Cannibalism, and the Periodic Table of Elements," April.

2019 Two computer programming tutorials for ~20 underresourced high school students at Watsonville High School, Watsonville, CA (with A. Quirk & A. Wasserman/coordinator: Angie Patino; "Python and Research (PyaR) Tutorial: Unraveling the History of the Andromeda Galaxy," April.

2019 Lecture for the Society of Physics Students, UCSC, Santa Cruz, CA; "The Research On-Ramp and Some Tips to Succeed in Research," May.

2019 Lecture for ~50 Shanti Bhavan students, Bangalore, India; "Galaxies: Dark Matter, Cannibalism, Black Holes, Gravitational Waves, and the Periodic Table of Elements," August.

2019 Two lectures for ~100 Creative School students and teachers, Bangalore, India; "Galaxies: Dark Matter, Cannibalism, Black Holes, Gravitational Waves, and the Periodic Table of Elements" and "Astrophysics and Art," August.

2019 Special lecture for ~30 students and parents at Garodia International School, Mumbai, India; "Careers in Astronomy & Astrophysics and Engaging in Research During School," August.

2019 Special lecture for ~10 students and parents at Aditya Birla World Academy, Mumbai, India; "Careers in Astronomy & Astrophysics and Engaging in Research During School," August.

2019 Special lecture for ~200 students and teachers of La Martiniere for Boys, Kolkata, India/coordinator: John Rafi; "Research in Astronomy & Astrophysics and Engaging in Research During School," August.

2019 Special lecture for ~12 students of La Martiniere for Girls, Kolkata, India/coordinator: Rupkatha Sarkar; "Research in Astronomy & Astrophysics and Engaging in Research During School," August.

2019 Seventh Father Verstraeten Memorial lecture for an audience of ~400 students and educators from various institutions, St. Xavier's College, Kolkata, India/coordinator: Dwarka Nath Bose; "Galaxies: Dark Matter, Cannibalism, Black Holes, Gravitational Waves, and the Periodic Table of Elements," August.

2019 Discussion and Lick Observatory remote observing session with ~150 students of Modern High School for Girls, Kolkata, India/coordinator: Mousumi Patra; "Careers in Astronomy & Astrophysics," August.

2019 Discussion session with ~30 students of St. Xavier's College, Kolkata, India/coordinator: Subhankar Ghosh; "Careers in Astronomy & Astrophysics," August.

2019 Special lecture for ~75 students and teachers, Harker School Research Club, San Jose, CA; "Modern Astrophysics Research, STEM Research Experiences for High School Students, and the Importance of Computer Programming," December.

2020 Discussion session with ~35 students of St. Xavier's College, Kolkata, India/coordinator: Subhankar Ghosh; "Special Topics in Astronomy & Astrophysics," January.

2020 Astronomy and art presentation and workshop for ~75 homeless elementary school girls, Loreto Literacy Centre, Loreto House, Kolkata, India/coordinator: Ayona Sandeep; February.

2020 Special lecture for ~80 students and teachers, Modern High School, Kolkata, India; "The Andromeda Galaxy, Research Opportunities for School Students, and the Importance of Computer Programming," February.

2020 Special lecture for ~20 high school students, Red Cloud Indian School, Pine Ridge, SD/coordinator: Katie Montez; "Modern Astrophysics Research, STEM Research Experiences for High School Students, and the Importance of Computer Programming," February.

2020 Astronomy presentation and workshop for ~30 students at 2020 Middle School STEAM Day, Georgetown Day School, Washington DC; "Dark Matter and Black Holes," March.

Undergraduate Academic Advising

2009–2010 Academic Advisor for 6 Physics undergraduates, all astrophysics majors

2010–2011 Academic Advisor for 9 Physics undergraduates, all astrophysics majors
2011–2012 Academic Advisor for 7 Physics undergraduates, all astrophysics majors
2012–2013 Academic Advisor for 6 Physics undergraduates, all astrophysics majors
2013–2014 Academic Advisor for 7 Physics undergraduates, all astrophysics majors
2014–2015 Academic Advisor for 6 Physics undergraduates, all astrophysics majors
2015–2016 Academic Advisor for 10 Physics undergraduates, all astrophysics majors
2016–2017 Academic Advisor for 9 Physics undergraduates, all astrophysics majors
2017–2018 Academic Advisor for 10 Physics undergraduates, all astrophysics majors
2018–2019 Academic Advisor for 8 Physics undergraduates, all astrophysics majors

Tutoring

1978–1985 Calcutta, India; tutored about 100 elementary, middle, and high school students over an 8-year period; physics, chemistry, math.
1989–1991 Princeton University, Princeton, NJ; tutored 3 undergraduate students for 1 semester each; Physics.

STUDENTS AWARDED Ph.D. DEGREE

1994 John Hibbard (assisted with supervision—Columbia U./advisor: J. van Gorkom)
1994 Arpad Szomoru (assisted with supervision—U. Groningen/advisor: J. van Gorkom)
1994 Zsolt Frei (assisted with supervision—Princeton U./advisor: J. Gunn)
1998 Kristine Ing (UCSC)
2000 David Reitzel (UCSC)
2001 Anouk Shambrook (UCSC)
2002 Philip Choi (UCSC)
2003 Marla Geha (UCSC)
2004 Justin Howell (UCSC; assisted by S. Faber and J. Brodie)
2008 Karoline Gilbert (UCSC)
2009 Evan Kirby (UCSC)
2011 Kirsten Howley (UCSC)
2015 Claire Dorman (UCSC)
2016 Katherine Hamren (UCSC; assisted by C. Rockosi and G. Smith)
2019 Emily Cunningham (UCSC; jointly with A. Deason and C. Rockosi)

ADVISEE HONORS AND AWARDS

John Hibbard—former Ph.D. student (co-supervised with J. van Gorkom, Columbia U.)
1994 Hubble Fellowship
1997 Astron. Soc. of the Pacific's Robert J. Trumpler award for best Ph.D. thesis

Eva Grebel—former postdoc, co-supervised with D. Zaritsky
1998 Hubble Fellowship

Marla Geha—former Ph.D. student
- 2003 Hubble Fellowship
- 2006 Plaskett Fellowship
- 2009 *Popular Science* magazine's annual top 10 young researchers
- 2010 Alfred P. Sloan Fellowship
- 2010 Appeared on UCSC's "45+5: Stars Among Us" list
- 2015 John S. Guggenheim Fellowship
- 2017 Howard Hughes Medical Institute Professor

Jasonjot Kalirai—former postdoc
- 2005 Hubble Fellowship
- 2013 Newton Lacy Pierce Prize of the American Astronomical Society
- 2013 Appeared on Baltimore Metropolitan Area's "40 under 40" list
- 2013 Maryland's Outstanding Scientist of the Year award
- 2014 Kavli Fellow

Evan Kirby —former Ph.D. student
- 2009 Hubble Fellowship
- 2012 Center for Galaxy Evolution Fellowship
- 2017 Newton Lacy Pierce Prize of the American Astronomical Society

Namrata Anand—former high school intern (Harker; SIP 2009)
- 2009–2010 Siemens semifinalist; Intel STS national finalist

Kevin Zhang—former high school intern (Harker; SIP 2009)
- 2009–2010 Intel STS semifinalist

Andrew Zhou—former high school intern (Harker; SIP 2009)
- 2009–2010 Siemens semifinalist; Intel STS semifinalist

Karoline Gilbert—former Ph.D. student
- 2010 Hubble Fellowship

Benjamin Chen—former high school intern (Harker; SIP 2010)
- 2010–2011 Intel STS semifinalist

Abrar Choudhury—former high school intern (Bellarmine; COSMOS 2010/SIP 2011)
- 2011 1st place, Earth and Space Sciences category, Synopsys Science Fair
- 2011–2012 Siemens semifinalist; Intel STS semifinalist
- 2012 Regional finalist, JSHS; 1st place (Physics & Astro.), CA State Science Fair

Lucy Cheng—former high school intern (Harker; SIP 2011/2012)
- 2011–2012 Siemens regional finalist; Intel STS semifinalist
- 2012 Regional finalist, JSHS; 1st place (Physics & Astro.), CA State Science Fair

Zareen Choudhury—former high school intern (Harker; SIP 2012/2013)
- 2012–2013 Siemens regional finalist
- 2013–2014 Siemens semifinalist

Victoria Dean—former high school intern (Castilleja; SIP 2011/2012)
- 2012–2013 Intel STS semifinalist

Caroline Debs—former high school intern (Castilleja; SIP 2012/2013)
- 2012–2013 Siemens regional finalist

Michelle Guo—former high school intern (Irvington; SIP 2012/2013)
- 2012–2013 Siemens semifinalist
- 2013–2014 Siemens semifinalist

Teresa Krause—former high school intern (Castilleja; SIP 2010/2011/2012)
2012–2013 Siemens semifinalist

Andrew Luo—former high school intern (Harker; SIP 2012)
2012–2013 Siemens semifinalist; Intel STS semifinalist

Debnil Sur—former high school intern (Bellarmine; SIP 2012)
2012–2013 Siemens semifinalist; Intel STS semifinalist

Andrew Zhang—former high school intern (Harker; SIP 2012/2013/2014)
2012–2013 Siemens semifinalist
2013–2014 Siemens semifinalist
2014–2015 Intel STS semifinalist

Ayesha Bajwa—former high school intern (Castilleja; SIP 2013; co-supervised with J. Werk)
2013–2014 Siemens regional finalist

Stephanie Chen—former high school intern (Harker; SIP 2013)
2013–2014 Siemens semifinalist; Intel STS semifinalist

Amy Cohn—former high school intern (Park Tudor, Indiana; SIP 2013)
2013–2014 Siemens regional finalist; Intel STS semifinalist

Anneliese Gallagher—former high school intern (Los Altos; COSMOS 2012/SIP 2013)
2013–2014 Siemens semifinalist

Smriti Pramanick—former high school intern (Castilleja; SIP 2013; co-supervised with J. Werk)
2013–2014 Siemens regional finalist

Neel Ramachandran—former high school intern (St. Francis; SIP 2013)
2013–2014 Siemens semifinalist

Kuriakose Sony Theakanath—former high school intern (Bellarmine; SIP 2013)
2013–2014 Siemens semifinalist

Samyukta Yagati—former high school intern (Harker; COSMOS 2012/SIP 2013)
2013–2014 Siemens semifinalist

Jason Chu—former high school intern (Harker; SIP 2014)
2014–2015 Siemens regional finalist

Jerry Hong—former high school intern (Palo Alto; SIP 2014)
2015 Regional finalist, JSHS; 2nd pl. (Physics+Astro.), N. CA State Science Fair

Ajinkya Nene—former high school intern (Lynbrook; SIP 2014)
2014–2015 Siemens semifinalist

Lea Sparkman—former high school intern (Castilleja; SIP 2013/2014/2015)
2014–2015 Siemens regional finalist
2015–2016 Intel STS semifinalist

Alice Wu—former high school intern (Harker; SIP 2014)
2014–2015 Siemens semifinalist

Kathryn Plant—former UCSC undergraduate
2015 Ron Ruby Undergraduate Research in Physics award
2017 National Science Foundation Graduate Research Fellowship

Jerry Chen—former high school intern (Harker; SIP 2016)
2016–2017 Siemens semifinalist

Gabriel Damon—former high school intern (Santa Cruz; SIP 2016)
2016–2017 Siemens semifinalist

Anita Ilango—former high school intern (Cupertino; SIP 2015/2016)
2016–2017 Siemens semifinalist

Megha Ilango—former high school intern (Cupertino; SIP 2015/2016)
2016–2017 Siemens semifinalist

Anika Kamath—former high school intern (Crystal Springs; SIP 2016)
2016–2017 Siemens semifinalist

Connie Miao—former high school intern (Harker; SIP 2016)
2016–2017 Siemens semifinalist

Arushi Sahai—former high school intern (Menlo; SIP 2016)
2016–2017 Siemens regional finalist

Alyssa Sales—former high school intern (Castilleja; SIP 2016)
2016–2017 Siemens semifinalist

Atmika Sarukkai—former high school intern (Castilleja; SIP 2016)
2016–2017 Siemens semifinalist

Andrew Shao—former high school intern (Lynbrook; SIP 2016/2017)
2016–2017 Siemens regional finalist

Teddy Liang—former high school intern (Menlo; SIP 2017)
2017–2018 Siemens semifinalist

Tiffany Louie—former high school intern (LACHSA; SIP 2017)
2017–2018 Siemens semifinalist

Kovid Tallam—former high school intern (St. Francis; SIP 2017)
2017–2018 Siemens semifinalist

Jin Tuan—former high school intern (Harker; SIP 2017)
2017–2018 Siemens semifinalist

Alis Deason—former postdoc
2018 Philip Leverhulme prize

Sagnick Mukherjee—current M.Sc. student (Presidency U., Kolkata, India)
2019 S. N. Bose Scholarship

Emily Cunningham—former Ph.D. student
2019 Flatiron Research Fellowship

Antara Bhattacharya—former high school intern (Navy Children, Mumbai, India; SIP 2019)
2019 Indian Science & Engineering Fair, national gold medalist
2019 IRIS National Fair, Department of Science & Technology

Jeffrey Munsell—former high school intern (Bronx HS of Science; SIP 2018/2019)
2014–2015 Regeneron STS semifinalist