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CITIZENSHIP USA

INTERESTS

Exoplanets
Brown dwarfs
Adaptive optics
High-contrast imaging
Science & engineering education

PROFESSIONAL MEMBERSHIP

Center for Adaptive Optics (CfAO)
SPIE (Society of photo-optical instrumentation engineers)
American Astronomical Society (AAS)
Institute for Scientist & Engineer Educators (ISEE)

EDUCATION

Ph.D. Candidate, Astronomy & Astrophysics anticipated March 2011
University of California, Santa Cruz, CA

- **DISSERTATION:** Adaptive optics for high-contrast imaging of faint substellar companions
 - *Committee: Bruce Macintosh, Jonathan Fortney, Don Gavel, Claire E. Max*

M.Sc., Astronomy & Astrophysics September 2006
University of California, Santa Cruz, CA

- **PROJECT:** Extreme adaptive optics and high-contrast imaging in astronomy
 - *Advisors: Scott Sevenson, Bruce Macintosh, Don Gavel, Claire E. Max*

B.A., *Magna cum Laude*, Astronomy & Physics May 2001

B.Sc., *Summa cum Laude*, Elementary Education May 2001
Boston University, Boston, MA

AWARDS

CODEP (Center for the Origin, Dynamics, & Evolution of Planets) Travel Grant	2011
UCSC Astronomy Department Award for Excellence in Teaching	2010
Michelson Graduate Fellow , NASA JPL Michelson Science Center	2007–2010
IGPP/LLNL University Collaborative Research Program Minigrant	2007
Regents Fellow , University of California at Santa Cruz (UCSC)	2004
Boston University Center for Space Physics Award for Excellence in Space Physics	2001
Boston University Institute for Astrophysical Research Award for Excellence in Astrophysics	2001
LANL Non-Proliferation & International Security Division Scholarship	1999–2001
Presidential Scholar , Boston University School of Education	1997–2001

RESEARCH

Graduate student researcher, Astronomical adaptive optics January 2005 – Present
Laboratory for Adaptive Optics, Center for Adaptive Optics, University of California, Santa Cruz, CA

- High-contrast imaging survey for brown dwarfs & other faint companions to Hyades solar-type stars
 - Proposed for, observed, and reduced near-IR deep NGS AO imaging around 88 Hyades stars
 - Modifying LOCI (locally optimized combination of images) speckle-suppression technique to detect and analyze photometry & astrometry of faint companions in 2 epochs
- MEMS (micro-electro-mechanical systems) deformable mirror (DM) experiments

- Analyzing performance of open-loop vs. closed-loop AO control of MEMS DM on-sky at Lick Observatory in MEMS-based visible-light AO system “ViLLaGEs”; Constructing error budget
- Empirically demonstrated that MEMS stroke saturates at mid-to-low spatial frequencies when compensating Kolmogorov turbulence, and thus can be effectively mitigated by adding a woofer
 - o Lab results contributed to pitch and stroke specifications for GPI woofer and tweeter DMs
- Measured sub-nanometer temporal stability and position repeatability of MEMS actuators
- Calibrated phase-to-volts model for open-loop AO control of MEMS DM
- Design & optimization of Lyot coronagraph for ExAO (Extreme Adaptive Optics) testbed
 - Modeled PSFs in Fourier optics simulation to specify radii, machining tolerances, and alignment sensitivities for optimal Lyot coronagraph that gives best contrast from 8–12 λ/D
 - o *Advisors: Bruce Macintosh (Lawrence Livermore National Laboratory), Scott Sevenson (Sonoma State University), Don Gavel, Claire Max, Jonathan Fortney (University of California at Santa Cruz)*

Graduate student researcher, Plasma physics

July – September 2004

Plasma Physics, Los Alamos National Laboratory (LANL), Los Alamos, NM

- Wrote IDL code to analyze plasma data taken with Mach-Zender interferometer
- o *Mentors: Martin Taccetti, John Benage (LANL)*

Site-testing technician/Observing assistant

May – October 2001

Lowell Observatory, Flagstaff, AZ

- Gathered, analyzed, and presented data to test 3 primary and 3 secondary sites for Discovery Channel Telescope using Differential Image Motion technique with a 14-inch Celestron
- Observed Triton occultation with South African Astronomical Observatory’s 74-inch Radcliffe telescope
- Operated Planet Search Survey Telescope remotely to find transiting extrasolar planets
- o *Supervisors: Ted Dunham, Tom Bida (Lowell Obs.), Jim Elliot (MIT)*

Undergraduate researcher, Space physics

Summers 1998 – 2000

Space & Atmospheric Sciences, Los Alamos National Laboratory, Los Alamos, NM

- Analyzed ion density variations via data from 5 geosynchronous satellites for *in-situ* study of magnetospheric plasma as related to solar wind storms and substorms
- o *Mentors: Michelle Thomsen, Dot Delapp (LANL)*

TECHNICAL EXPERIENCE

Successful observing proposals

- A DEEP ADI SEARCH FOR EXOPLANETS ORBITING YOUNG EARLY-TYPE STARS 10-m Keck-II, 2009B
B. Macintosh, C. Marois, T. Barman, B. Zuckerman, Q. Konopacky, **K. Morzinski**
- BROWN DWARF COMPANIONS TO SOLAR-TYPE STARS IN THE HYADES 3-m Lick Shane, 2009B
K. Morzinski, B. Macintosh, B. Grigsby
- A STELLAR OCCULTATION BY THE KBO 55636 1-m Lick Crossley, 2009 3rd qrtr.
A. Zangari, **K. Morzinski**, J. Elliot, B. Grigsby
- ViLLaGEs ENGINEERING 1-m Lick Nickel, monthly, 2007 Fall – Present
D. Gavel, S. Sevenson, B. Grigsby, D. Dillon, M. Reinig, M. Ammons, **K. Morzinski**, L. Johnson
- A DEEP ANGULAR-DIFFERENTIAL-IMAGING SEARCH FOR EXOPLANETS 10-m Keck-II, 2007A
B. Macintosh, C. Marois, B. Zuckerman, I. Song, T. Barman, **K. Morzinski**

Observatory experience

- Keck Observatory, Mauna Kea, HI
 - o 10-m Keck II + NIRC2 NGS AO (near-IR AO imaging)
- Lick Observatory, Mount Hamilton, CA

- 3-m Shane + IRCAL NGS AO (near-IR AO imaging)
- 1-m Nickel + ViLLaGEs NGS AO (optical MEMS AO)
- 1-m Crossley + POETS (Portable occultation, eclipse, & transit system) high-speed CCD
- South African Astronomical Observatory, Sutherland, ZA
 - 2-m Radcliffe + PCCD (Portable CCD) (high-speed optical photometry)
- Lowell Observatory, Flagstaff, AZ
 - 40-cm Celestron + PCCD (Portable CCD) (optical stripscan photometry)
 - 30-cm Planet Search Survey Telescope (optical wide-field imaging)

Laboratory experience

- Laboratory for Adaptive Optics, Santa Cruz, CA
 - Extreme Adaptive Optics Testbed
 - Phase-Shifting Diffraction Interferometer (PSDI): sub-nm accuracy custom interferometer
 - Lyot coronagraph
 - Zygo commercial Fizeau interferometer
 - Boston Micromachines' MEMS deformable mirrors

PROFESSIONAL DEVELOPMENT

Certification

- Certificate in Teaching Innovative Laboratory Experiences 2010
Institute for Scientist and Engineer Educators

Summer schools

- Stars as homes for habitable planetary systems 26–30 July 2010
Sagan/NEExScI Summer Workshop, Pasadena, CA
- Exoplanetary atmospheres 20–24 July 2009
Sagan/NEExScI Summer Workshop, Pasadena, CA
- Circumstellar disks and planets at very high angular resolution 27 May–8 June 2007
VLT “On the Fringe” Summer School, Porto, PT
- Advanced adaptive optics 6–12 August 2005
Center for Adaptive Optics (CfAO) Summer School, Santa Cruz, CA

Teaching & leadership training

- Inquiry in science & engineering learning & teaching 23–27 March 2010
ISEE Professional Development Program (PDP) Workshop, Lahaina, Maui, HI
- Learning from inquiry in practice 16–17 January 2010
ISEE PDP Community Interchange Conference, Santa Cruz, CA
- Inquiry in science & engineering learning & teaching 8–12 May 2009
CfAO/ISEE PDP Workshop, Lahaina, Maui, HI
- Project management 6 November 2008
CfAO Fall Retreat, Lake Arrowhead, CA
- Experiencing & applying inquiry in science learning & teaching 13–17 March 2008
CfAO PDP Workshop, Makena, Maui, HI
- Inquiry in science education 2–6 March 2007
CfAO PDP Workshop, Wailea, Maui, HI
- Peace Corps training October – December 2001
U.S. Peace Corps, Namibia
intermittently 2002–2003

LEADERSHIP & TEACHING

Undergraduate students co-mentored

- **Andrew P. Norton**, UCSC January 2007 – June 2008
Effects of hysteresis on MEMS deformable mirrors used in ground and space-based telescopes
- **Layra Reza**, UCSC Summer 2005
Characterization of MEMS deformable mirrors for wavefront control in extreme adaptive optics

Peer leadership & curriculum development

- **Lab director**, AO SUMMER SCHOOL LABS, *CfAO* August 2010
CfAO Adaptive Optics Summer School, *Director S. Mark Ammons*
- **Leader/Designer/Facilitator**, AO SYSTEM DESIGN, *ISEE PDP* April–June 2010
Astronomy 289C: Adaptive optics and its applications, UCSC, *Professor Claire E. Max*
- **Facilitator**, FOURIER OPTICS, *CfAO* February 2008 & May 2010
Astronomy 289C: Adaptive optics and its applications, UCSC, *Professor Claire E. Max*
- **Facilitator**, COMPARING APPROACHES TO HANDS-ON LEARNING, *ISEE PDP* January 2010
Education 221: Science learning & teaching / elementary, UCSC, *Profs. Jerome Shaw, Joyce Hill*
- **Designer/Facilitator**, CIRCUIT DESIGN, *ISEE PDP* October 2009
Electronics 101: Introduction to electronics technology, MCC, *Professor Mark Hoffman*
- **Facilitator**, AO VISION SCIENCE, *CfAO* August 2009
CfAO Adaptive Optics Summer School, *Directors Mike Fitzgerald and S. Mark Ammons*
- **Leader/Designer/Facilitator**, DIGITAL IMAGE FILES, *ISEE PDP* October 2008
Electronics 102: Instrumentation for engineering technicians, MCC, *Professor Elisabeth Reader*
- **Leader/Designer/Facilitator**, DETECTORS AND IMAGE FILES, *ISEE PDP* March 2008
Electronics 201: Digital computer technology I, MCC, *Professor Mark Hoffman*

Classroom teaching

- **Teaching assistant, Solar system**, UCSC September – December 2004
Astronomy 3: The solar system, *Professor Adriane Steinacker*
- **Teacher, Grades 9–12 Physical science**, U.S. Peace Corps January 2002 – December 2003
Rehoboth High School, Namibia, *Principals Leslie Maasdorp & David Titus*
- **Classroom astronomer partner**, *Project:ASTRO Boston* 1999 – 2001
Edward Devotion School & Timilty Middle School, *Teachers Connie Quackenbush & Alison Piatkowski*

PROFESSIONAL SERVICE

- Referee**, *Optics Express* 2009 – Present
- Journal club presenter**, Minority Access to Research Careers (MARC/MBRS) 2008 – 2009
- Tour guide**, Laboratory for Adaptive Optics guests & visitors 2005 – Present

PRESENTATIONS

- Performance of visible-light MEMS AO at Lick Observatory in closed and open loop
CfAO Fall Retreat *October 2010, Lake Arrowhead, CA*
- Adaptive optics & high-contrast imaging (POP)
Sagan/NEExSci Workshop, Stars as Homes for Habitable Planets *July 2010, Pasadena, CA*
- Performance of MEMS-based visible-light adaptive optics at Lick Observatory
SPIE Astronomical Telescopes & Instrumentation *July 2010, San Diego, CA*
- Astronomical adaptive optics with MEMS deformable mirrors (INVITED TALK)
CfAO Adaptive Optics Seminar *March 2010, Berkeley, CA*
- A high-contrast adaptive optics imaging search for brown dwarfs (POP)
UCSC Astronomy Research Jamboree *February 2010, Santa Cruz, CA*
- Circuit design: An inquiry lab activity at Maui Community College (POSTER)
Institute for Scientist & Engineer Educators Conference *January 2010, Santa Cruz, CA*
- A high-contrast adaptive optics imaging search for brown dwarfs
Sagan/Michelson Fellows Symposium *November 2009, Pasadena, CA*
- A high-contrast adaptive optics imaging search for brown dwarfs
CfAO Fall Retreat *November 2009, Lake Arrowhead, CA*
- SPOCCIE: Sagan Polar Orbiting Coronagraph Camera for Imaging Exoplanets (WORKSHOP PROJECT)
Sagan/NEExSci Workshop, Exoplanetary Atmospheres *July 2009, Pasadena, CA*
- Search for brown dwarf companions to Hyades stars using LOCI PSF-subtraction technique (POP)
Sagan/NEExSci Workshop, Exoplanetary Atmospheres *July 2009, Pasadena, CA*
- Search for brown dwarf companions using LOCI PSF-subtraction technique
UCSC Tuesday Astronomy Lunchtime Kaleidoscope *April 2009, Santa Cruz, CA*
- MEMS deformable mirrors: Experiments at the Laboratory for Adaptive Optics at UCSC
Herzberg Institute of Astrophysics AO Coffee *February 2009, Victoria, BC*
- Search for brown dwarfs in Hyades (POP)
UCSC Astronomy Research Jamboree *January 2009, Santa Cruz, CA*
- Empirical measurement of MEMS stroke saturation, with implications for woofer-tweeter architectures (POSTER) *CfAO Fall Retreat* *November 2008, Lake Arrowhead, CA*
- “Digital image file” inquiry: Maui Community College instrumentation course
NSF Site Visit to CfAO *September 2008, Santa Cruz, CA*
- Empirical measurement of MEMS stroke saturation, with implications for woofer-tweeter architectures (POSTER) *SPIE Astronomical Telescopes & Instrumentation* *June 2008, Marseille, FR*
- Characterizing MEMS for open-loop operation: High resolution measurements of thin-plate behavior
SPIE Photonics West *January 2008, San Jose, CA*
- Interferometry & observations at very high angular resolution: The VLTI summer school
UCSC Summer Friday Lunchtime Astrophysical Seminar Hour *July 2007, Santa Cruz, CA*
- VLTI proposal: Search for circumstellar disks around massive stars (SUMMER SCHOOL PROJECT)
VLTI School, Circumstellar Disks & Planets at High Ang. Resolution *June 2007, Porto, PT*
- The open-loop control of MEMS: Modeling and experimental results
SPIE Photonics West *January 2007, San Jose, CA*
- Picturing extrasolar planets: The Gemini Planet Imager
UCSC Honors Undergraduate Seminar in Astrophysical Research *November 2006, Santa Cruz, CA*
- MEMS spatial frequency response: Stroke for sinusoids and Kolmogorov atmospheres
CfAO Fall Retreat *November 2006, Yosemite, CA*
- Farfield alignment sensitivity
ExAO Testbed PSDI Phase II Readiness Review *October 2006, Santa Cruz, CA*

- The extreme adaptive optics testbed at UCSC
NSF Site Visit to CfAO *September 2006, Santa Cruz, CA*
- Observing parameters for ViLLaGEs instrument on Nickel telescope
ViLLaGEs Preliminary Design Review *August 2006, Santa Cruz, CA*
- Characterizing the potential of MEMS deformable mirrors for astronomical adaptive optics
SPIE Astronomical Telescopes & Instrumentation *May 2006, Orlando, FL*
- Extreme adaptive optics and high-contrast imaging in astronomy (MASTER'S PROJECT TALK)
UCSC Friday Lunchtime Astrophysical Seminar Hour *May 2006, Santa Cruz, CA*
- Lyot coronagraph optimization
ExAO Testbed PSDI Phase II Design Review *April 2006, Santa Cruz, CA*
- Extreme adaptive optics testbed: Characterization of MEMS deformable mirrors
CfAO Spring Retreat *March 2006, Santa Cruz, CA*
- Nickel LGS visible-light AO science case
CfAO Spring Retreat *March 2006, Santa Cruz, CA*
- Extreme adaptive optics testbed: Characterization of a MEMS deformable mirror
CfAO Fall Retreat *November 2005, Lake Arrowhead, CA*
- Extreme adaptive optics testbed: Laboratory for Adaptive Optics
CfAO Advanced Summer School on Adaptive Optics *August 2005, Santa Cruz, CA*

PUBLICATIONS

Peer-reviewed papers

1. A HIGH-CONTRAST ADAPTIVE OPTICS SEARCH FOR LATE-TYPE COMPANIONS TO HYADES DWARFS
K. Morzinski, B. A. Macintosh, C. Marois, J. Patience, J. Fortney, B. Grigsby, K. Cahoy
ApJ, in prep (2011)
2. ON-SKY DEMONSTRATION OF VISIBLE-LIGHT MEMS ADAPTIVE OPTICS AND OPEN-LOOP CONTROL
K. Morzinski, L. C. Johnson, D. T. Gavel, B. Grigsby, S. M. Ammons, D. Dillon, M. Reinig, S. A. Severson, B. Bauman, D. Palmer, B. A. Macintosh, et. al.
PASP, in prep (2010)
3. SIZE AND ALBEDO OF KUIPER BELT OBJECT 55636 FROM A STELLAR OCCULTATION
J. L. Elliot, M. J. Person, C. A. Zuluaga, A. S. Bosh, E. R. Adams, T. C. Brothers, A. A. S. Gulbis, S. E. Levine, M. Lockhart, A. M. Zangari, B. A. Babcock, K. Dupré, J. M. Pasachoff, S. P. Souza, W. Rosing, N. Secrest, L. Bright, E. W. Dunham, S. S. Sheppard, M. Kakkala, T. Tillemann, B. Berger, J. W. Briggs, G. Jacobson, P. Vallemi, B. Volz, S. Rapoport, R. Hart, M. Brucker, R. Michel, A. Mattingly, L. Zambrano-Marin, A. W. Meyer, J. Wolf, E. V. Ryan, W. H. Ryan, **K. Morzinski**, B. Grigsby, J. Brimacombe, D. Ragozzine, H. G. Montano, A. Gilmore
Nature 465, 897–900 (2010)
4. STROKE SATURATION ON A MEMS DEFORMABLE MIRROR FOR WOOFER-TWEETER ADAPTIVE OPTICS
K. Morzinski, B. Macintosh, D. Gavel, D. Dillon
Optics Express 17, 5829–5844 (2009)
5. DEMONSTRATING SUB-NM CLOSED LOOP MEMS FLATTENING
J. W. Evans, B. Macintosh, L. Poyneer, **K. Morzinski**, S. Severson, D. Dillon, D. Gavel, L. Reza
Optics Express 14, 5558–5570 (2006)
6. TWO-SATELLITE OBSERVATIONS OF SUBSTORM INJECTIONS AT GEOSYNCHRONOUS ORBIT
M. F. Thomsen, J. Birn, J. E. Borovsky, **K. Morzinski**, D. J. McComas, G. D. Reeves
Journal of Geophysical Research 106, 8405–8416 (2001)

Conference proceedings, first author

7. PERFORMANCE OF MEMS-BASED VISIBLE-LIGHT ADAPTIVE OPTICS AT LICK OBSERVATORY: CLOSED- AND OPEN-LOOP CONTROL
K. Morzinski, L. C. Johnson, D. T. Gavel, B. Grigsby, D. Dillon, M. Reinig, B. A. Macintosh
Proc. SPIE 7736, 773659–773659-16 (2010)
8. DIGITAL IMAGE EXPLORATION AT MAUI COMMUNITY COLLEGE
K. M. Morzinski, C. J. Crockett, I. J. Crossfield
ASP Conference Series 436, Learning from Inquiry in Practice, in press (2010)
9. CIRCUIT DESIGN: AN INQUIRY LAB ACTIVITY AT MAUI COMMUNITY COLLEGE
K. Morzinski, O. Azucena, C. Downs, T. Favaloro, J. Park, V. U
ASP Conference Series 436, Learning from Inquiry in Practice, in press (2010)
10. EMPIRICAL MEASUREMENT OF MEMS STROKE SATURATION, WITH IMPLICATIONS FOR WOOFER-TWEETER ARCHITECTURES
K. M. Morzinski, B. A. Macintosh, D. Dillon, D. Gavel, D. Palmer, A. Norton
Proc. SPIE 7015, 70153N–70153N-12 (2008)
11. CHARACTERIZING MEMS DEFORMABLE MIRRORS FOR OPEN-LOOP OPERATION: HIGH-RESOLUTION MEASUREMENTS OF THIN-PLATE BEHAVIOR
K. M. Morzinski, D. T. Gavel, A. P. Norton, D. R. Dillon, M. R. Reinig

- Proc. SPIE 6888*, 68880S–68880S-12 (2008)
12. THE OPEN-LOOP CONTROL OF MEMS: MODELING AND EXPERIMENTAL RESULTS
K. M. Morzinski, K. B. W. Harpsøe, D. T. Gavel, S. M. Ammons
Proc. SPIE 6467, 64670G–64670G-10 (2007)
13. CHARACTERIZING THE POTENTIAL OF MEMS DEFORMABLE MIRRORS FOR ASTRONOMICAL ADAPTIVE OPTICS
K. M. Morzinski, J. W. Evans, S. Severson, B. Macintosh, D. Dillon, D. Gavel, C. Max, D. Palmer
Proc. SPIE 6272, 627221–627221-12 (2006)

Conference proceedings, co-author

14. THE ADAPTIVE OPTICS SUMMER SCHOOL LABORATORY ACTIVITIES
M. Ammons, J.D. Armstrong, I. Crossfield, T. Do, M. Fitzgerald, D. Harrington, A. Hickenbotham, J. Hunter, J. Johnson, L. Johnson, K. Li, J. Lu, H. Maness, **K. Morzinski**, A. Norton, N. Putnam, A. Roorda, E. Rossi, S. Severson, S. Yelda
ASP Conference Series 436, Learning from Inquiry in Practice, in press (2010)
15. PRELIMINARY CHARACTERIZATION OF BOSTON MICROMACHINES 4096-ACTUATOR DEFORMABLE MIRROR
A. Norton, J. W. Evans, D. Gavel, D. Dillon, D. Palmer, B. Macintosh, **K. Morzinski**, S. Cornelissen
Proc. SPIE 7209, 72090I–72090I-7 (2009)
16. VILLAGES: OPTO-MECHANICAL DESIGN OF AN ON-SKY VISIBLE-LIGHT MEMS-BASED AO SYSTEM
Proc. SPIE 7018, 701841–701841-12 (2008)
B. Grigsby, C. Lockwood, B. Baumann, D. Gavel, J. Johnson, S. M. Ammons, D. Dillon, **K. Morzinski**, M. Reinig, D. Palmer, S. Severson, E. Gates
17. APPLICATION OF HARTMANN LINEARITY CALIBRATIONS TO VILLAGES
S. M. Ammons, D. T. Gavel, D. R. Dillon, M. Reinig, B. Grigsby, **K. M. Morzinski**
Proc. SPIE 7015, 701546–701546-8 (2008)
18. VISIBLE LIGHT LASER GUIDESTAR EXPERIMENTAL SYSTEM (VILLAGES): ON-SKY TESTS OF NEW TECHNOLOGIES FOR VISIBLE WAVELENGTH ALL-SKY COVERAGE ADAPTIVE OPTICS SYSTEMS
D. Gavel, M. Ammons, B. Bauman, D. Dillon, E. Gates, B. Grigsby, J. Johnson, C. Lockwood, **K. Morzinski**, D. Palmer, M. Reinig, S. Severson
Proc. SPIE 7015, 70150G–70150G-11 (2008)
19. VILLAGES: AN ON-SKY VISIBLE WAVELENGTH ASTRONOMY AO EXPERIMENT USING A MEMS DEFORMABLE MIRROR
D. Gavel, S. Severson, B. Bauman, D. Dillon, M. Reinig, C. Lockwood, D. Palmer, **K. Morzinski**, M. Ammons, E. Gates, B. Grigsby
Proc. SPIE 6888, 688804–688804-7 (2008)
20. THE EXTREME ADAPTIVE OPTICS TESTBED AT UCSC: CURRENT RESULTS AND CORONAGRAPHIC UPGRADE
S. A. Severson, B. Bauman, D. Dillon, J. Evans, D. Gavel, B. Macintosh, **K. Morzinski**, D. Palmer, L. Poyneer
Proc. SPIE 6272, 62722J–62722J-12 (2006)
21. THE GEMINI PLANET IMAGER
B. Macintosh, J. Graham, D. Palmer, R. Doyon, D. Gavel, J. Larkin, B. Oppenheimer, L. Saddlemyer, J. K. Wallace, B. Bauman, J. Evans, D. Erikson, **K. Morzinski**, D. Phillion, L. Poyneer, A. Sivaramakrishnan, R. Soummer, S. Thibault, J.-P. Veran

Proc. SPIE 6272, 62720L–62720L-12 (2006)

22. EXTREME ADAPTIVE OPTICS TESTBED: PERFORMANCE AND CHARACTERIZATION OF A 1024-MEMS DEFORMABLE MIRROR

J. W. Evans, **K. Morzinski**, S. Severson, L. Poyneer, B. Macintosh, D. Dillon, L. Reza, D. Gavel, D. Palmer, S. Olivier, P. Bierden

Proc. SPIE 6113, 131–136 (2006)

23. EXTREME ADAPTIVE OPTICS TESTBED: HIGH CONTRAST MEASUREMENTS WITH A MEMS DEFORMABLE MIRROR

J. W. Evans, **K. Morzinski**, L. Reza, S. Severson, L. Poyneer, B. A. Macintosh, D. Dillon, G. Sommargren, D. Palmer, D. Gavel, S. Olivier

Proc. SPIE 5905, 303–310 (2005)

Conference abstracts

23. HIGH-CONTRAST ADAPTIVE OPTICS AND A SEARCH FOR LATE-TYPE COMPANIONS TO HYADES FGK DWARFS

K. M. Morzinski

BAAS 217, Dissertation Talk (05. Stars/cool stars/brown dwarfs), submitted (2011)

24. A SEARCH FOR SATELLITES OF KUIPER BELT OBJECT 55636 FROM THE 9 OCTOBER 2009 OCCULTATION

R. Jensen-Clema, J. L. Elliot, M. J. Person, C. A. Zuluaga, A. S. Bosh, E. R. Adams, T. C. Brothers, A. A. S. Gulbis, S. E. Levine, M. Lockhart, A. M. Zangari, B. A. Babcock, K. DuPré, J. M. Pasachoff, S. P. Souza, W. Rosing, N. Secrest, L. Bright, E. W. Dunham, M. Kakkala, T. Tillemann, S. Rapoport, L. Zambrano-Marin, J. Wolf, **K. Morzinski**

BAAS 217, submitted (2011)

25. TRITON'S ATMOSPHERIC STRUCTURE IN 2001 FROM THE TR231 OCCULTATION

M. J. Person, J. L. Elliot, J. Pate, I. Glass, R. C. Stone, **K. M. Morzinski**, E. W. Dunham

BAAS 33, 1130 (2001)