Publication List

Duncan Forbes

Contents

1 Referreed Publications **2**

2 Five Most Important Published Papers **6**

3 Non–Refereed Publications **8**

4 Hubble Space Telescope Projects **12**

1 Refereed Publications

1. **On the Origin of Globular Clusters in Elliptical and cD Galaxies** by Duncan Forbes, Carl Grillmair and Jean Brodie. Submitted to *A. J.*

2. **Globular Clusters in the Sombrero Galaxy (NGC 4594)** by Duncan Forbes, Carl Grillmair and Chris Smith. Submitted to *A. J.*

3. **Hubble Space Telescope Imaging of the Globular Cluster System around NGC 5846** by Duncan Forbes, Jean Brodie and John Huchra. *A. J.* in press.

4. **Globular Cluster Luminosity Functions and the Hubble Constant from WFPC2 Imaging: The Dominant Group Elliptical NGC 5846** by Duncan Forbes, Jean Brodie and John Huchra. *A. J.* in press.

5. **Globular Cluster Luminosity Functions and the Hubble Constant from WFPC2 Imaging: Galaxies in the Coma I Cloud** by Duncan Forbes. *A. J.* **112** 1409.

6. **Globular Cluster Luminosity Functions and the Hubble Constant from WFPC2 Imaging: The Giant Elliptical NGC 4365** by Duncan Forbes. *A. J.* **112** 954.

7. **Angular Sizes of an I $<$ 21.7 Galaxy Sample from the HST Medium Deep Survey** by Andrew Phillips, Caryl Gronwall, David Koo, Duncan Forbes, Garth Illingworth and John Huchra. Submitted to *Ap. J.*.

8. **Redshift z$\sim$1 Field Galaxies Observed with the Keck Telescope and the Hubble Space Telescope** by David Koo, Nicole Vogt, Andrew Phillips, Katherine Wu, Sandra Faber, Caryl Gronwall, Duncan Forbes and Garth Illingworth. *Ap. J.* **469** 535.

9. **Optical Rotation Curves of Distant Field Galaxies I: Keck Results at Redshifts to z $\sim$ 1** by Nicole Vogt, Duncan Forbes and the DEEP team. *Ap. J. (Letters)* **465** L15.

10. **Ellipticals with Kinematically Distinct Cores: WFPC2 Imaging of Globular Clusters** by Duncan Forbes, Marijn Franx, Garth Illingworth and Marcella Carollo. *Ap. J.* **467** 126.

11. **Ellipticals with Kinematically Distinct Cores: V–I Color Maps with WFPC2** by Marcella Carollo, Marijn Franx, Garth Illingworth and Duncan Forbes. *Ap. J.* in press.

12. **Forbidden Fe^+ Emission from Active Galaxies** by Chris Simpson, Duncan Forbes, Amanda Baker and Martin Ward. *Mon. Not. R. Astr. Soc.* **283** 777.

13. **Near–infrared Line and Continuum Imaging of the Nuclear Starburst Region of NGC 1808** by Jari Kotilainen, Duncan Forbes, Alan Moorwood, Paul van der Werf and Martin Ward. *A. & A.* **313** 771.

14. **Keck Spectroscopy and HST Imaging of Field Galaxies at Moderate Redshift** by Duncan Forbes, Andrew Phillips, David Koo and Garth Illingworth. *Ap. J.* 1996 **462** 89.

15. **Near–infrared Line and Continuum Imaging of the Double Nucleus Starburst Galaxy NGC 3256** by Jari Kotilainen, Alan Moorwood, Martin Ward and Duncan Forbes. *A. & A.* 1996 **305** 107.

16. **Ellipticals with Kinematically Distinct Cores: WFPC1 Imaging of Nearby Ellipticals** by Duncan Forbes, Marijn Franx and Garth Illingworth. *A. J.* 1995 **109** 1988.

17. **Shell Colors in the Peculiar Elliptical Galaxy IC 1459** by Duncan Forbes, David Reitzel and Gerard Williger. *A. J.* 1995 **109** 1576.

18. **Radio Detection of a Double Nucleus in the Merging Galaxy NGC 3256** by Ray Norris and Duncan Forbes. *Ap. J.* 1995 **446** 594.

19. **The Nuclear Colors and Morphology of Field Galaxies at Moderate Redshift** by Duncan Forbes, Rebecca Elson, Andrew Phillips, David Koo and Garth Illingworth. *Ap. J. (Letters)* 1994 **437** L17.

20. **NGC 7552: A Galaxy with a Dormant Active Nucleus ?** by Duncan Forbes, Jari Kotilainen and Alan Moorwood. *Ap. J. (Letters)* 1994 **433** L13. **[Highlighted in *Sky & Telescope* May 1995, p15]**

21. **Structure and Photometry of an I $<$ 20.5 Faint Galaxy Sample from the HST Medium Deep Survey** by Andrew Phillips, Matthew Bershady, Duncan Forbes et al. *Ap. J.* 1995 **444** 21.

22. **HST Imaging of the Large Magellanic Cloud: The Field Star Population near 30 Doradus** by Rebecca Elson, Duncan Forbes and Gerard Gilmore. *PASP* 1994 **106** 632.

23. **The Hubble Space Telescope Medium Deep Survey: I. Preliminary Results on the Field Near 3C 273** by Richard Griffiths, the MDS team and Duncan Forbes. *Ap. J.* 1994 **437** 67.

24. **Ellipticals with Kinematically Distinct Cores: HST Imaging of the Nuclear Structure of IC 1459** by Duncan Forbes, Marijn Franx and Garth Illingworth. *Ap. J. (Letters)* 1994 **428** L49.

25. **Flat–fielding and Photometric Accuracy of the HST Wide Field Camera** by Andrew Phillips, Duncan Forbes, Matthew Bershady, Garth Illingworth and David Koo. *A. J.* 1994 **107** 1904.

26. **Planetary Camera Imaging of the Kinematically Distinct Core Galaxy NGC 4365** by Duncan Forbes. *A. J.* 1994 **107** 2017.

27. **A Search for Secondary Nuclei in Shell Galaxies** by Duncan Forbes, Robert Thomson, Wendy Groom and Gerard Williger. *A. J.* 1994 **107** 1713.

28. **A Nuclear Starburst Ring in the Spiral Galaxy NGC 7552** by Duncan Forbes, Ray Norris, Gerard Williger and Chris Smith. *A. J.* 1994 **107** 984. **[Highlighted in the *New Scientist* 1909, 15]** **[Highlighted in *Sky & Telescope* March 1994, p10]**

29. **Radio and Near–infrared [FeII] Emission from Active Galaxies** by Duncan Forbes and Martin Ward. *Ap. J.* 1993 **416** 150.

30. **Activity in LINER and Starburst Galaxies** by Duncan Forbes. *Astrophysics & Space Sci.* 1993 **205** 37.

31. **High Resolution Imaging of [FeII] 1.64μm, Brγ and H_2 Emission in the Starburst Galaxy NGC 253** by Duncan Forbes, Martin Ward, Valentin Rotaciuc, Markus Blietz, Reinhard Genzel, Seigfred Drapatz, Paul van der Werf and Alfred Krabbe. *Ap. J. (Letters)* 1993 **406** L11.

32. **Near–infrared Line Imaging of NGC 6240** by Paul van der Werf, Reinhard Genzel, Alfred Krabbe, Markus Blietz, Seigfred Drapatz, Martin Ward and Duncan Forbes. *Ap. J.* 1993 **405** 522.

33. **NGC 1808: AGN or Starburst ?** by Duncan Forbes, Catherine Boisson and Martin Ward. *Mon. Not. R. Astr. Soc.* 1992 **259** 293.

34. **Near–Infrared Surface Photometry of NGC 253** by Duncan Forbes and Darren DePoy. *Astron. & Astr.* 1992 **259** 97.

35. **Shells and Isophotal Distortions in Elliptical Galaxies** by Duncan Forbes and Robert Thomson. *Mon. Not. R. Astr. Soc.* 1992 **254** 723.

36. **The Mass–to–light ratio in Spiral Galaxies** by Duncan Forbes. *Astron. & Astr. Supp. Series* 1992 **92** 583.

37. **Near–infrared Imaging of LINER and Starburst Galaxies** by Duncan Forbes, Martin Ward, Darren DePoy, Catherine Boisson and Malcolm Smith. *Mon. Not. R. Astr. Soc.* 1992 **254** 509.

38. **Infrared Hotspots in the Nucleus of NGC 253** by Duncan Forbes, Martin Ward and Darren DePoy. *Ap. J. (Letters)* 1991 **380** L63.
[*Science News Magazine* **includes this work as one of the astronomical highlights of 1991.**]

39. **Infrared Hotspots Discovered in the Nucleus of the Starburst Galaxy NGC 253** by Duncan Forbes, Martin Ward and Darren DePoy. In *Relationships Between Active Galactic Nuclei and Starburst Galaxies* held in Taipei, Taiwan, p 225, ed A. Filippenko 1992, P.A.S.P. Conference Series.

40. **On the External Origin for Dust in Ellipticals** by Duncan Forbes. *Mon. Not. R. Astr. Soc.* 1991 **249** 779.

41. **Extended Emission–line gas around the Quasars 3C 254 and 3C 309.1; very massive cooling flows** by Duncan Forbes, Carolin Crawford, Andrew Fabian and Roderick Johnstone. *Mon. Not. R. Astr. Soc.* 1990 **244** 680.

42. **Rotation Curves for Spiral Galaxies in Clusters and in the Field** by Bradley Whitmore and Duncan Forbes. *Astrophysics & Space Sci.* 1989 **156** 175.

43. **The Distribution of Mass for Spiral Galaxies in Clusters and in the Field** by Duncan Forbes and Bradley Whitmore. *Ap. J.* 1989 **339** 657.

44. **Rotation Curves for Spiral Galaxies in Clusters. II. Variations as a Function of Cluster Position** by Bradley Whitmore, Duncan Forbes and Vera Rubin. *Ap. J.* 1988 **333** 542.

PhD Thesis

45. **Galaxies in the Infrared** by Duncan Forbes.
PhD accepted by the University of Cambridge.

2 Five Most Important Published Papers

• **A Nuclear Starburst Ring in the Spiral Galaxy NGC 7552** by Duncan Forbes, Ray Norris, Gerard Williger and Chris Smith. *A. J.* 1994 **107** 984.
[Highlighted in the *New Scientist* 1909, 15]
[Highlighted in *Sky & Telescope* March 1994, p10]

• **Radio and Near–infrared [FeII] Emission from Active Galaxies** by Duncan Forbes and Martin Ward. *Ap. J.* 1993 **416** 150.

• **Shells and Isophotal Distortions in Elliptical Galaxies** by Duncan Forbes and Robert Thomson *Mon. Not. R. Astr. Soc.* 1992 **254** 723.

• **On the External Origin for Dust in Ellipticals** by Duncan Forbes *Mon. Not. R. Astr. Soc.* 1991 **249** 779.

• **Keck Spectroscopy and HST Imaging of Field Galaxies at Moderate Redshift** by Duncan Forbes, Andrew Phillips, David Koo and Garth Illingworth. *Ap. J.* 1996 **462** 89.

3 Non–Refereed Publications

Conference Proceedings and Newsletters

46. **HST Imaging of Globular Clusters in Kinematically-Distinct Cores Ellipticals** by Duncan Forbes. In *The Nature of Elliptical Galaxies, Proceedings of the Second Stromlo Symposium* held in Canberra, Australia, ed. M. Arnaboldi, G. Da Costa and P. Saha, 1997 in press

47. **DEEP Keck Survey of Field Galaxies Imaged by HST** by Garth Illingworth, Duncan Forbes, Rafael Guzman, Andrew Phillips and Nicole Vogt. In *Science with the Hubble Space Telescope – II* held in Paris, France, p 147, ed. P. Benvenuti, F. Macchetto and E. Schreier, 1996, Paris

48. **HST Imaging of the Dust in Kinematically Distinct Core Ellipticals** by Duncan Forbes. In *New Extragalactic Perspectives in the New South Africa* held in Johannesburg, South Africa, p 416, ed. D. Block and J. Greenberg, 1996, Kluwer, Dordrecht
[Invited Talk]

49. **Keck Spectroscopy of Moderate Redshift Galaxies Imaged by HST** by Duncan Forbes, Andrew Phillips, David Koo and Garth Illingworth. In IAU171 *New Light on Galaxy Evolution* held in Heidelberg, Germany, p 375, ed. R. Bender and R. Davies, 1996, Kluwer, Dordrecht

50. **Near–IR View of the Nuclear Region of NGC 1808** by Jari Kotilainen, Duncan Forbes, Alan Moorwood, Paul van der Werf and Martin Ward. In *Spiral Galaxies in the Near–IR* held in Garching, Germany, ed. D. Minitti and H.W. Rix, 1996, Springer Verlag, Berlin.

51. **The Nature of Faint Galaxies from the Medium Deep Survey and other deep HST Images** by Rogier Windhorst, the MDS team and Duncan Forbes. In *Galaxies in the Young Universe* held in Garching, Germany, ed. H. Hippelein, K. Meisenheimer, and H. Roeser, 1995, Springer Verlag, Berlin.

52. **The HST Medium Deep Survey: Galaxy Morphology at High Redshift** by Richard Griffiths, the MDS team and Duncan Forbes. In *Examining the Big Bang and Diffuse Background Radiations* held in The Hague, Holland,

ed. M Kafatos, 1995, Kluwer, Dordrecht.

53. **The Medium Deep Survey using the Hubble Space Telescope** by Richard Griffiths, the MDS team and Duncan Forbes. In *Frontiers of Space and Ground-based Astronomy* held in Holland, p 677, ed. W. Wamsteker, M. Longair and Y. Kondo, 1994, Kluwer, Dordrecht.

54. **Near–Infrared Observations of Starburst and Seyfert Galaxies** by Duncan Forbes and Martin Ward. In *The Physics of Active Galaxies* held in Canberra, Australia, p 429, ed. G. Bicknell, M. Dopita and P. Quinn, 1994, PASP conference series, San Francisco.
[Invited Review Talk]

55. **The HST Medium Deep Survey: Sizes of Galaxies at Moderate Redshift** by Richard Griffiths, the MDS team and Duncan Forbes. In *The Evolution of the Universe and its Observational Quest* held in Yamada, Japan, p 387, ed. K Sato, 1994, Universal Acad. Press, Tokyo.

56. **Compact Array Mapping of the Nuclear Starburst in NGC 7552** by Duncan Forbes, Ray Norris, Gerry Williger and Chris Smith.
In IAU 158 *Very High Angular Resolution Imaging* held in Sydney, Australia, p 355, ed. J. G. Robertson and W. J. Tango 1994, Kluwer, Dordrecht.

57. **An HR Diagram for the LMC from the Medium Deep Survey** by Duncan Forbes and the MDS team.
In IAU 158 *Very High Angular Resolution Imaging* held in Sydney, Australia, p 404, ed. J. G. Robertson and W. J. Tango 1994, Kluwer, Dordrecht.

58. **Warm and Cold Gas in NGC 253: The Relationship of MM and Near–infrared Observations** by Paul van der Werf, Murray Cameron, Reinhard Genzel, Markus Blietz, Alfred Krabbe, Duncan Forbes and Martin Ward.
In IAU 140 *Astronomy with Millimeter and Submm Wave Interferometry* held in Hakone, Japan.

59. **Near–IR Spectroscopic Imaging of the Starburst Galaxies NGC 6240 and NGC 253** by Markus Blietz, Murray Cameron, Seigfred Drapatz, Reinhard Genzel, Alfred Krabbe, Paul van der Werf, Duncan Forbes and Martin Ward.
In *Panchromatic View of Galaxies* held in Kiel, Germany, p 234, ed. G. Hensler, Ch. Theis and J. Gallagher 1993, Editions Frontieres, France.

60. **A True Colour CCD Image of Abell 1367** by Robert Thomson and Duncan Forbes. *Gemini* 1992 **38** 30.
[This image was chosen for the cover of the La Palma telescope group's annual report for 1992.]

61. **Infrared Detection of Supernova Remnants in the Nucleus of NGC 253?** by Duncan Forbes. In *The Stellar Populations of Galaxies* held in Angra Dos Reis, Brazil, p 416, ed. B. Barbuy and A. Renzini 1992, Kluwer, Dordrecht.

62. **Near–infrared Imaging of the Merger Candidate NGC 1052** by Duncan Forbes. In *Dynamics of Galaxies and their Molecular Cloud Distributions* held in Paris, France, p 398, ed. F. Combes and F. Casoli 1991, Kluwer, Dordrecht.

63. **Dust and Ionized Gas in Active Radio Elliptical Galaxies** by Duncan Forbes, William Sparks and Duccio Macchetto. In *Paired and Interacting Galaxies* held in Alabama, USA, p 431, ed J. W. Sulentic, W. C. Keel and C. M. Telesco 1990, NASA conference publication 3098.

64. **The Discovery of Very Extended Emission Lines around the Quasar 3C 254** by Andrew Fabian, Carolin Crawford, Duncan Forbes and Roderick Johnstone. *Gemini* 1989 **26** 6.

65. **Extended Emission Lines around Quasars** by Duncan Forbes, Andrew Fabian, Roderick Johnstone and Carolin Crawford. In *Extra–nuclear Activity in Galaxies* held in Garching, Germany, p 67, ed. E. J. A. Meurs and R. A. E. Fosbury 1989, European Southern Observatory.

66. **An Objective Classification system for Spiral Galaxies and its relationship to the [NII]/[SII] ratio** by Bradley Whitmore and Duncan Forbes. In *Le Monde des Galaxies* held in Paris, France, p 95, ed. H. Corwin and L. Bottinelli 1989, Springer–Verlag.

Abstracts

67. **Deep Keck Redshift Survey of Field Galaxies Imaged by the HST** by Rafael Guzman, The DEEP team and Duncan Forbes. *Bull. Am. Astr. Soc.* 1995 **27** 1355.

68. **Highlights from the HST Medium Deep Survey** by Richard Griffiths, the MDS team and Duncan Forbes. *Bull. Am. Astr. Soc.* 1995 **26** 1404.

69. **Keck Spectroscopy of Moderate Redshift Galaxies Imaged by HST** by Duncan Forbes and the MDS team *Bull. Am. Astr. Soc.* 1995 **26** 1495.

70. **Properties of Field Galaxies to I = 22 from the Medium Deep Survey** by Andrew Phillips, Duncan Forbes and the MDS team *Bull. Am. Astr. Soc.* 1995 **26** 1495.

71. **Line–Width Correlations in Seyfert Galaxies** by David Moore, Phillip Blanco and Duncan Forbes. *Bull. Am. Astr. Soc.* 1994 **25** 1361.

72. **Structure and Photometry of Faint Galaxies in a Magnitude–Limited I–band Sample from the HST Medium Deep Survey** by Duncan Forbes and the Medium Deep Survey team. *Bull. Am. Astr. Soc.* 1994 **25** 1385.

73. **Field Galaxies from the Medium Deep Survey** by Duncan Forbes and the Medium Deep Survey team. *Bull. Am. Astr. Soc.* 1993 **25** 836.

74. **Limits to Galaxy Clustering Evolution from Deep WFC Images** by Lyman Neuschaefer, the MDS team and Duncan Forbes. *Bull. Am. Astr. Soc.* 1992 **24** 1191.

75. **Deconvolution of WFC Images on Faint Field Galaxies** by Rogier Windhorst, the MDS team and Duncan Forbes. *Bull. Am. Astr. Soc.* 1992 **24** 1222.

76. **Faint Galaxy Morphology** by David Schade, the MDS team and Duncan Forbes. *Bull. Am. Astr. Soc.* 1992 **24** 1300.

77. **Near–infrared Hotspots Discovered in the Nuclear Region of the Starburst Galaxy NGC 253** by Duncan Forbes. *Bull. Am. Astr. Soc.* 1992 **23** 1462.

78. **A comparison of Mass distributions in Cluster and Field Spirals** by Duncan Forbes and Bradley Whitmore. *Bull. Am. Astr. Soc.* 1987 **19** 685.

79. **The amount of Dark Matter in Spiral Galaxies in Clusters** by Bradley Whitmore, Vera Rubin and Duncan Forbes. *Bull. Am. Astr. Soc.* 1987 **19** 713.

4 Hubble Space Telescope Projects

• **Resolving the Radio Hotspots in Nearby Starburst Galaxies** by Duncan Forbes and Martin Ward. Cycle 6 proposal. Involvement: P.I.

• **Extragalactic Globular Cluster Systems** by Jean Brodie, John Huchra, Duncan Forbes, Ken Freeman and Carl Grillmair. Cycle 6 proposal. Involvement: Co-I.

• **Globular Clusters and Shells in Elliptical Galaxies** by Duncan Forbes and Carl Grillmair. Cycle 5 proposal. Involvement: P.I.

• **Globular Clusters in Fornax Galaxies** by Carl Grillmair, Duncan Forbes, Ken Freeman and Rebecca Elson. Cycle 5 proposal. Involvement: Co-I.

• **Ellipticals with Kinematically Distinct Cores** by Marijn Franx, Garth Illingworth and Duncan Forbes. Cycle 4 proposal. Involvement: Co-I.

• **Medium Deep Survey Key Project** by Richard Griffiths *et al.* Cycle 4 proposal. Involvement: postdoctoral fellow.