

Karl Gebhardt  
*Curriculum Vitae*

## Mail Addresses

University of Texas at Austin  
Astronomy Department  
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Residence:  
1415 Cloverleaf Drive  
Austin, TX 78723

## Personal Data

Birth: Easton, PA, Aug. 19, 1964

Current Status: Professor

## Education

1994, Ph.D. in Physics and Astronomy, Rutgers University.

1990, M.S. Physics and Astronomy, Michigan State University, East Lansing, MI.

1986, B.S. Physics and Astronomy, University of Rochester, Rochester, NY.

## Research Experience

2006 – present Professor, University of Texas at Austin

2006 – present Project Scientist, Hobby-Eberly Telescope Dark Energy Experiment

2005 – 2006 Visiting Professor, Max-Planck-Institut fuer Extraterrestrische Physik

2004 – 2006 Associate Professor, University of Texas at Austin

2000 – 2004 Assistant Professor, University of Texas at Austin

1997 – 2000 Hubble Fellow, University of California, Santa Cruz

1994 – 1997 Postdoctoral research, University of Michigan

1991 – 1994 Ph.D. research with Dr. C. Pryor and Dr. T.B. Williams

1987 – 1991 M.S. research with Dr. T.C. Beers at Michigan State University

## Honors and Awards

2004 NSF CAREER Award

2004 Teaching Excellence Award, McDonald Board of Visitors

2003 Teaching Excellence Award, University of Texas

2003 Benjamin Dean Lecturer, Morrison Planetarium

2001 Invited talk at American Astronomical Society Meeting

1997 – 2000 Hubble Fellowship

1995 Recipient of the 1995 Northeastern Association of Graduate  
Schools Dissertation Award (2 per year in Science)

1991 – 1993 U.S. Department of Education Fellowship

1990 Best Teaching Assistant at Michigan State University

## Teaching Experience

Professor, University of Texas, 2000–present

2008, Fall, AST 301, “Introductory Astronomy”, undergraduate

2008, Fall, AST 309, “Popular Astronomy”, undergraduate

2008, Spring, AST 301, “Introductory Astronomy”, undergraduate

2008, Spring, AST 309, “Popular Astronomy”, undergraduate

2007, Spring, AST 358, “Galaxies”, advanced undergraduate

2006, Fall, AST 309, “Popular Astronomy”, undergraduate

2005, Spring, AST 358, “Galaxies”, undergraduate

2004, Fall, AST 309, “Popular Astronomy”

2004, Spring, AST 381C, “Gravitational Dynamics”, graduate

2004, Spring, AST 358, “Galaxies”, undergraduate

2003, Spring, AST 309, “Popular Astronomy”

2002, Fall, AST 104, “Undergrad Astronomy Seminar”

2002, Fall, AST 301, “Introductory Astronomy”

2002, Spring, AST 309, “Popular Astronomy”

2001, Fall, AST 301, “Introductory Astronomy”

2001, Spring, AST 309, “Popular Astronomy”

Substitute teaching, University of Michigan, 1993–1997

Taught numerous astronomy classes, undergraduate and graduate

Teaching Assistant, Rutgers University, 1991–1993

Classes in Introductory Astronomy

Instructor, Michigan State University, 1990

Instructor for Introductory Physics Course

## Graduate Students Supervised

Marcel Bergmann (Co-Advisor), Ph.D. 2002

“Properties of Early-Type Galaxies in the Field and in Clusters”

Julia Silge, M.A., Ph.D. 2005

“Sweep the Dust Away: Kinematic Properties of Nearby Galaxies”

Marsha Wolf (Co-Advisor), Ph.D. 2005

“Galaxy Evolution at Red Shifts of  $z$  1-2”

Eva Noyola, Ph.D. 2006

“Dynamical Studies of Globular Clusters and Their Connection to Galaxy Formation”

Amy Forestell, M.A., anticipated Ph.D. 2009

“Dark Halo Profiles in Elliptical Galaxies”

Amanda Bauer (Co-Advisor), Ph.D. 2008

“Emission Line Properties of High Redshift Galaxies”

John Blum, M.S. 2009

“Can Globular Cluster IMBH Microlens Events Be Detected”

Josh Adams (Co-Advisor), anticipated Ph.D. 2010

“Lyman-Alpha Emitters”

Guillermo Blanc, anticipated Ph.D. 2010

“Star Formation and Lyman-Alpha Emitters”

Jeremy Murphy, anticipated Ph.D. 2010  
“Dark Halo Profiles for Brightest Cluster Galaxies”

## Undergraduate Students Supervised

Joyce Byun (2007–2009), Alysha Shugart (2008–2009), Seth Anderson (2008–2009),  
Dillon Kuenher (2008–2009), Alexander Fry (2006–2008), Jeff Kinzler (2006–2007),  
Robert Hollingsworth (2004–2005), Rebecca Christian (2001–2003), Sarah Busch (2003–2004),  
Andrew Horning (2003–2004), Phillip Cargile (2003–2005), Heather Barnes (2003),  
Rodolfo Montez (2001–2002), Allen Ehrlicher (2001)

## Departmental Committees

Member, Graduate Studies Committee (2008–present)  
Chair, Evaluations Committee (2007–2008)  
Chair, Post-Tenure Review Committee (2006–2007)  
Member, STARDATE Advisor Council (2006–present)  
Undergraduate Astronomy Advisor (2002–2005)  
Member, GMT Science Working Group (2004–present)  
Member, HET Users Committee (2002–present)  
Chair: McDonald Users Committee (2001–2003)  
McDonald Director Advisory Committee (2001–2003)  
McDonald Observatory Telescope Allocation Committee (2001–2004)  
Natural Science Course and Curriculum Committee (2001–2005)  
Member, Faculty Search Committee (2003)  
Member, Faculty Search Committee (2004)

## Professional Public Service

2009 Member, NRC Astro2010 Decadal Survey  
2007–present Member, NOAO Telescope Allocation Committee  
2007–present Referee for European Research Council  
2006–2009 Member, AURA Oversight Committee for Gemini Telescope  
2005–2009 Chair, NOAO Gemini Science Advisory Committee  
2008–2009 Member, NASA/DoE JDEM Science Coordination Group  
2009 Member, NSF Fellowship Selection Committee  
2008 Conference Organizer for Leiden Workshop on Black Holes and Nuclear Clusters  
2007 Member, NRC Beyond Einstein Program Assessment Committee  
2007 Member, Galaxy Panel of HST Telescope Allocation Committee  
2006 Member, ESO OPC  
2005 Member, NSF AST Senior Review  
2004 Member, Galaxy Panel of HST Telescope Allocation Committee  
2004 Conference Organizer of Intermediate Mass Black Hole Workshop at Penn State  
2003 Member, Gemini Observatory Aspen Workshop  
2002 NASA Space Science Update on Black Holes in Globular Clusters  
2002 Conference Organizer of Black Hole Workshop at UCSB/ITP  
2002 Referee, Israeli National Science Foundation  
2001 Member, NSF Galaxy Panel Grant Selection Committee

- 2001 Conference Organizer of Omega Cen Workshop at Cambridge
- 2000 Member, NSF Fellowship Selection Committee
- 2000 Member, NASA SIM Science Selection Panel
- 1998 Member, Galaxy Panel of HST Telescope Allocation Committee
- 1998–present Referee for NSF, ApJ, AJ, ApJL, MNRAS, A&A, NSERC, Canadian TAC

### Participation in Public Lectures or Forums

- 2009 Speaker at San Antonio Science Museum
- 2009 Speaker at Society of Physics Students, Austin
- 2009 Austin Lions Club Speaker
- 2008 Keynote Speaker at St. Edwards University
- 2008 Speaker at Lehman High School
- 2008 Featured Speaker at Smithsonian Associates in Washington D.C
- 2008 Dark Energy Webpage at <http://hetdex.org/>
- 2007 Keynote Speaker at Siemens Award Banquet
- 2007 Public Lecture, Texas Academy of Medicine, Engineering, Science and Technology
- 2007 Dean’s Scholars Lecture Series, University of Texas
- 2006 City of Rochester OASIS Group Lecture
- 2006 Public Lecture, School of Architecture, University of Texas “HETDEX”
- 2005 Black Hole Webpage at <http://blackholes.stardate.org/>
- 2004 Public Lecture, Cleveland Museum of Natural History “Black Holes in the Universe”
- 2004 Public Lecture, University of Texas Honors Colloquium “Black Holes in the Universe”
- 2003 Public Lecture, Morrison Planetarium “Black Holes and Dark Matter”
- 2003 Public Lecture, Lakeway Club “Black Holes and Dark Matter”
- 2003 Dean’s Scholars Lecture Series, University of Texas
- 2002 TV appearance, NASA Space Science Update “Black Holes in Unexpected Places”
- 2001 Radio Show, Earth & Sky “Black Holes”
- 2001 TV appearance, Discovery Channel “Horizon–Supermassive Black Holes”
- 2001 TV appearance, Japan Science Series “Supermassive Black Holes”
- 2000 Dean’s Scholars Lecture Series, University of Texas

### Refereed Publications

- 93. K. Gebhardt & J. Thomas 2009, “The Black Hole Mass, Stellar M/L, and Dark Halo in M87”, ApJ, submitted
- 92. K. Gultekin et al. 2009, “The M-sigma and M-L Relations in Galactic Bulges and Determinations of their Intrinsic Scatter”, ApJ, accepted
- 91. K. Gultekin et al. 2009, “A Quintet of Black Hole Mass Determinations”, ApJ, accepted
- 90. J. Thomas et al. 2009, “The flattening and the orbital structure of early-type galaxies and collisionless N-body binary disk mergers”, MNRAS, 393, 641
- 89. J. Thomas et al. 2009, “Dark matter scaling relations and the assembly epoch of Coma early-type galaxies”, ApJ, 691, 770

88. M. Bernardi et al. 2008, “A Search for the Most Massive Galaxies. II. Structure, Environment and Formation”, MNRAS, 391, 1191
87. S. Salviander et al. 2008, “In Search of the Largest Velocity Dispersion Galaxies”, ApJ, 687, 828
86. N. Nowak et al. 2008, “The supermassive black hole of Fornax A”, MNRAS, 391, 1629
85. C. Siopis, K. Gebhardt et al. 2008, “A Stellar Dynamical Measurement of the Black Hole Mass in the Maser Galaxy NGC 4258”, ApJ, 693, 946
84. P. Humphrey et al. 2008, “Weighing the Quiescent Central Black Hole in an Elliptical Galaxy with X-Ray-Emitting Gas”, ApJ, 683, 161
83. E. Noyola, K. Gebhardt, & M. Bergmann 2008, “Gemini and Hubble Space Telescope Evidence for an Intermediate Mass Black Hole in omega Centauri”, ApJ, 676, 1008
82. F. Bash, K. Gebhardt, M. Goss, P. van den Bout 2008, “VLA Limits for Intermediate Mass Black Holes in Three Globular Clusters”, AJ, 135, 182 A,0
81. M. Norris et al. 2008, “Gemini/GMOS Spectroscopy of the Spheroid and Globular Cluster System of NGC 3923”, MNRAS, 385, 40 C,0
80. K. Gebhardt et al. 2007, “The Black Hole Mass and Extreme Orbital Structure in NGC1399”, ApJ, 671, 1321 A,0
79. J. Thomas et al. 2007, “Dynamical modelling of luminous and dark matter in 17 Coma early-type galaxies”, MNRAS, 382, 657 C,0
78. E. Noyola, & K. Gebhardt 2007, “Surface Brightness Profiles for a Sample of LMC, SMC, and Fornax Galaxy Globular Clusters”, AJ, 134, 912 C,0
77. N. Nowak et al. 2007, “The supermassive black hole in NGC4486a detected with SINFONI at the Very Large Telescope”, MNRAS, 379, 909 C,0
76. S. Salviander, G. Shields, K. Gebhardt, and E. Bonning, 2007, “The Black Hole Mass - Galaxy Bulge Relationship for QSOs in the SDSS DR3”, ApJ, 662, 131 C,0
75. E. Bonning, L. Cheng, G. Shields, S. Salviander, and K. Gebhardt 2007, “Accretion Disk Temperatures and Continuum Colors in QSOs”, ApJ, 659, 211 D,0
74. M. Wolf, N. Drory, K. Gebhardt, and G. Hill 2007, “Ages and Metallicities of Extragalactic Globular Clusters from Spectral and Photometric Fits of Stellar Population Synthesis Models”, ApJ, 655, 179 C,0
73. R. Koehler, P. Schuecker, K. Gebhardt 2007, “Probing Dark Energy with Baryonic Acoustic Oscillations at High Redshifts”, A&A, 462, 7 C,0
72. T. Lauer, K. Gebhardt et al. 2007, “The Centers of Early-Type Galaxies with HST. VI. Bimodal Central Surface Brightness Profiles”, ApJ, 664, 226 C,0
71. T. Lauer et al. 2007, “The Masses of Nuclear Black Holes in Luminous Elliptical Galaxies and Implications for the Space Density of the Most Massive Black Holes”, ApJ, 662, 808 C,0

70. T. Bridges, K. Gebhardt et al. 2006, “The globular cluster kinematics and galaxy dark matter content of NGC 4649 (M60)”, *MNRAS*, 373, 157 C,0
69. D. McLaughlin et al. 2006, “Hubble Space Telescope Proper Motions and Stellar Dynamics in the Core of the Globular Cluster 47 Tucanae”, *ApJS*, 166, 249 C,0
68. K. Shapiro et al. 2006, “The black hole in NGC 3379: a comparison of gas and stellar dynamical mass measurements with HST and integral-field data”, *MNRAS*, 370, 559 C,0
67. G. Hill, et al. 2006, “VIRUS: A hugely replicated integral field spectrograph for HETDEX”, *NewAR*, 50, 378 C,0
66. E. Noyola and K. Gebhardt 2006, “Surface Brightness Profiles of Galactic Globular Clusters from Hubble Space Telescope Images”, *AJ*, 132, 447 C,0
65. R. van den Bosch, T. de Zeeuw, K. Gebhardt, E. Noyola, & G. van de Ven 2006, “The Dynamical Mass-to-Light Ratio Profile and Distance of the Globular Cluster M15”, *ApJ*, 641, 852 C,0
64. K. Gebhardt, R.M. Rich, & L.C. Ho 2005, “An Intermediate-Mass Black Hole in the Globular Cluster G1: Improved Significance from New Keck and Hubble Space Telescope Observations”, *ApJ*, 634, 1093 A,0
63. V. Sarajedini et al. 2006, “The DEEP Groth Strip Survey VI. Spectroscopic, Variability, and X-ray DEtection of AGN”, *ApJS*, 166, 69 D,0
62. M. Pierce et al. 2006, “Gemini/GMOS Spectra of Globular Clusters in the Virgo giant Elliptical NGC 4649”, *MNRAS*, 368, 325 C,0
61. S. Faber et al. 2007, “Galaxy Luminosity Functions to  $z$  1: DEEP2 vs. COMBO-17 and Implications for Red Galaxy Formation”, *ApJ*, 665, 265 D,0
60. R. Proctor, D. Forbes, A. Forestell, K. Gebhardt 2005, “Spatially resolved stellar populations in the isolated elliptical NGC 821”, *MNRAS*, 362, 857 C,0
59. J. Silge & K. Gebhardt 2005, “An All-Infrared Fundamental Plane”, *AJ*, submitted C,0
58. M. Wolf, N. Drory, K. Gebhardt, G. Hill 2007, “Ages and Metallicities of Extragalactic Globular Clusters from Spectral and Photometric Fits of Stellar Population Synthesis Models”, *ApJ*, 665, 179 C,0
57. M. Pierce et al. 2006, “Gemini/GMOS Spectra of Globular Clusters in the Leo Group Elliptical NGC 3379”, *MNRAS*, 366, 1253 C,0
56. J. Thomas et al. 2005, “Regularized orbit models unveiling the stellar structure and dark matter halo of the Coma elliptical NGC 4807”, *MNRAS*, 360, 1355 C,0
55. N. Vogt et al. 2005, “The DEEP Groth Strip Survey. I. The Sample”, *ApJS*, 159, 41 D,0
54. T. Lauer et al. 2005, “The Centers of Early-Type Galaxies with Hubble Space Telescope. V. New WFPC2 Photometry”, *AJ*, 129, 2138 C,0

53. J. Kormendy, K. Gebhardt et al. 2005, “The Nuclear Disk in the Dwarf Elliptical Galaxy NGC 4486A”, *AJ*, 129, 2636 C,0
52. D. Koo et al. 2005, “The DEEP Groth Strip Survey. VIII. The Evolution of Luminous Field Bulges at Redshift  $z=1$ ”, *ApJS*, 157, 175 C,0
51. B. Weiner et al. 2005, “The DEEP Groth Strip Galaxy Redshift Survey. III. Redshift Catalog and Properties of Galaxies”, *ApJ*, 620, 595 C,0
50. J. Silge, K. Gebhardt, M. Bergmann, & D. Richstone, “Gemini/GNIRS Observations of the Central Supermassive Black Hole in Centaurus A”, 2005, *AJ*, 130, 406 C,0
49. D. Forbes et al. 2004, “Gemini/GMOS imaging of globular clusters in the Virgo galaxy NGC 4649 (M60)”, *MNRAS*, 355, 608 C,0
48. C. Nelson et al. 2004, “The Relationship Between Black Hole Mass and Velocity Dispersion in Seyfert 1 Galaxies”, *ApJ*, 615, 652 C,1
47. J. Thomas et al. 2004, “Mapping stationary axisymmetric phase-space distribution functions by orbit libraries”, *MNRAS*, 234, 1365–1379 C,1
46. K. Gebhardt et al. 2003, “The DEEP Groth Strip Survey XI: Evolution of the Fundamental Plane of Field Galaxies”, *ApJ*, 597, 239–262 A,1
45. R.M. Rich, D. Reitzel, P. Guhathakurta, K. Gebhardt, & L.C. Ho 2004, “Deep Photometry in a Remote M31 Major axis Field Near G1”, *AJ*, 127, 2139 C,1
44. K. Gebhardt et al. 2003, “Axisymmetric Dynamical Models of the Central Regions of Galaxies”, *ApJ*, 583, 92–115 A,1
43. J. Silge & K. Gebhardt 2003 “Dust and the Infrared Kinematic Properties of Early-Type Galaxies”, *AJ*, 125, 2809–2823 A,1
42. B. Xie, C. Pryor, K. Gebhardt, & T. Williams 2003 “No Evidence of a Large Central Mass-to-Light Ratio in NGC6752”, *AJ*, submitted C,1
41. T. Richtler, B. Dirsch, K. Gebhardt et al. 2003, “The Globular Cluster System of NGC1399:II. Spectroscopy of a Large Sample of Globular Clusters”, *AJ*, 127, 2094 C,1
40. B. Dirsch et al. 2003, “The Globular Cluster System of NGC1399:III. VLT MXU Spectroscopy and Database”, *AJ*, 127, 2114 D,1
39. J. Pinkney, K. Gebhardt et al. 2003, “Kinematics of Ten Early-Type Galaxies from HST and Ground-Based Spectroscopy”, *ApJ*, 596, 903–929 A,1
38. K. Gebhardt 2002, “Astronomy: Into the Heart of Darkness”, *Nature*, 419, 675–676 A,1
37. G. Shields, K. Gebhardt et al. 2003, “QSO Emission Lines and the Black Hole-Galaxy Bulge Relation”, *ApJ*, 583, 124–133 C,1
36. R. van der Marel et al. 2002, “HST Search for an Intermediate-Mass Black Hole in the Globular Cluster M15 - I. STIS Spectroscopy and WFPC2 Photometry”, *AJ*, 124, 3255–3269 C,1

35. J. Gerssen et al. 2002, “HST Search for an Intermediate-Mass Black Hole in the Globular Cluster M15 - II. Kinematical Analysis and Dynamical Modeling”, *AJ*, 124, 3270–3288; Addendum, *AJ*, 125, 376–377 C,1
34. K. Gebhardt, R.M. Rich, and L. Ho 2002, “A 20 Thousand Solar Mass Black Hole in the Stellar Cluster G1”, *ApJL*, 578, L41–L45 A,1
33. S. Tremaine, K. Gebhardt et al. 2002, “The Slope of Black Hole Mass versus Velocity Dispersion Correlation”, *ApJ*, 574, 740–753 C,1
32. T. Lauer, K. Gebhardt et al. 2002, “Galaxies with a Central Minimum in Stellar Luminosity Density”, *AJ*, 124, 1975–1987 C,1
31. M. Im et al. 2002, “The DEEP Groth Strip Survey X: Number Density and Luminosity Function of Field E/S0 Galaxies at  $z < 1$ ”, *ApJ*, 571, 136–171 C,1
30. K. Gebhardt et al. 2001, “M33: A Galaxy with No Supermassive Black Hole”, *AJ*, 122, 2469–2476 A,1
29. S. Norton, K. Gebhardt, A. Zabludoff, & D. Zaritsky 2001, “Kinematics of E+A Galaxies”, *ApJ*, 557, 150–164 A,1
28. M. Im et al. 2001, “Are There Blue, Massive E/S0 Galaxies at  $z < 1$ ? Kinematics of Blue Spheroidal Galaxy Candidates”, *AJ*, 122, 750–763 C,1
27. G. Bower et al. 2001, “Evidence of a Supermassive Black Hole in the Galaxy NGC 1023 from the Nuclear Stellar Dynamics”, *ApJ*, 550, 75–86 C,1
26. K. Gebhardt et al. 2000, “Black Hole Mass Estimates from Reverberation Mapping and from Spatially Resolved Kinematics”, *ApJL*, 543, L5–L8 A,2
25. K. Gebhardt et al. 2000, “A Relationship between Nuclear Black Hole Mass and Galaxy Velocity Dispersion”, *ApJL*, 539, L13–L16 A,2
24. K. Gebhardt, C. Pryor, R.O’Connell T.B. Williams, & J.E. Hesser 2000, “Adaptive Optics Observations of the Central Kinematics in M15”, *AJ*, 119, 1268–1281 A,2
23. H. Kobulnicky & K. Gebhardt 2000, “Obtaining Galaxy Masses Using Stellar Absorption and [O II] Emission-Line Diagnostics in Late-Type Galaxies”, *AJ*, 119, 1608–1626 A,2
22. K. Gebhardt, D. Richstone et al. 2000, “Axisymmetric, 3-Integral Models of Galaxies: A Massive Black Hole in NGC 3379”, *AJ*, 119, 1157–1171 A,2
21. K. Gebhardt & M. Kissler-Patig 1999, “Globular Cluster Systems I: V-I Color Distributions”, *AJ*, 118, 1526–1541 A,2
20. L. Simard et al. 1999, “The Magnitude-Size Relation of Galaxies out to  $z=1$ ”, *ApJ*, 519, 563–579 C,2
19. D. Richstone et al. 1998, “Supermassive Black Holes and the Evolution of Galaxies”, *Nature*, 395A, 14–19 C,2
18. M. Kissler-Patig, K. Gebhardt 1998, “The Spin of M87 as Measured from its Globular Cluster System”, *AJ*, 116, 2237–2245 A,2

17. J. Magorrian et al. 1998, “The Demography of Massive Dark Objects in Galaxy Centers”, *AJ*, 115, 2285–2305 C,2
16. K. Gebhardt, C. Pryor, T.B. Williams, J.E. Hesser, & P.B. Stetson 1997, “Fabry-Perot Observations of Globular Clusters III: M15”, *AJ*, 113, 1026–1038 A,2
15. P. Schechter, et al. 1997, “The Quadruple Gravitational Lens PG 1115+080: Time Delays and Models”, *ApJL*, 475, L85–L88 D,2
14. S. Faber, S. Tremaine et al. 1997, “The Centers of Early-Type Galaxies with HST IV: Central Parameter Relations”, *AJ*, 114, 1771–1796 C,2
13. J. Kormendy et al. 1997, “Spectroscopic Evidence for a Supermassive Black Hole in NGC 4486B”, *ApJL*, 482, L139–L142 D,2
12. J. Kormendy et al. 1996, “Hubble Space Telescope Spectroscopic Evidence for a  $1 \times 10^9 M_{\odot}$  Black Hole in NGC 4594”, *ApJ*, 473, L91–L94 D,2
11. T. Lauer et al. 1996, “Hubble Space Telescope Observations of the Double Nucleus of NGC 4486B”, *ApJL*, 471, L79–L82 D,2
10. J. Kormendy et al. 1996, “Hubble Space Telescope Spectroscopic Evidence for a  $2 \times 10^9 M_{\odot}$  Black Hole in NGC 3115”, *ApJL*, 459, L57–L60 D,2
9. K. Gebhardt, D. Richstone et al. 1996, “The Centers of Early-Type Galaxies with HST III: Non-Parametric Recovery of Stellar Luminosity Distributions”, *AJ*, 112, 105–113 A,2
8. K. Gebhardt, C. Pryor, T.B. Williams, & J.E. Hesser 1995, “Fabry-Perot Measurements of the Dynamics of Globular Clusters II: 47 Tuc, NGC 6397, and M30”, *AJ*, 110, 1699–1711 B,3
7. P. Côté, D. Welch, P. Fischer, & K. Gebhardt 1995, “Dynamics of the Galactic Globular Cluster NGC 3201”, *ApJ*, 454, 788–806 C,3
6. K. Gebhardt, P. Fischer 1995, “Nonparametric Dynamical Analysis of Globular Clusters: M15, 47 Tuc, NGC 362, and NGC 3201”, *AJ*, 109, 209–217 A,3
5. K. Gebhardt, C. Pryor, T.B. Williams, & J.E. Hesser 1994, “Fabry-Perot Measurements of the Dynamics of Globular Clusters: M15 (NGC 7078)”, *AJ*, 107, 2067–2076 B,3
4. T.C. Beers, K. Gebhardt, J.P. Huchra, W. Forman, C. Jones, & G.D. Bothun 1992, “A Spatial, Kinematical, and Dynamical Analysis of Abell 400”, *ApJ*, 400, 410–429 C,3
3. K. Gebhardt, & T.C. Beers 1991, “Bound Populations Around cD Galaxies and cD Velocity Offsets in Clusters of Galaxies”, *ApJ*, 383, 72–89 B,3
2. T.C. Beers, W. Forman, J.P. Huchra, C. Jones, & K. Gebhardt 1991, “A Dynamical Analysis of Twelve Clusters of Galaxies”, *AJ*, 102, 1581–1609 C,3
1. T.C. Beers, K. Flynn, & K. Gebhardt 1990, “Measures of Location and Scale for Velocities in Clusters of Galaxies - A Robust Approach”, *AJ*, 100, 32–46 C,3

Letters in the right-hand margin refer to the following categories: A is group leader and principle investigator, B is primary junior researcher, C is essential collaborator, and D is peripheral collaborator. Numbers in the right-hand margin refer to the stage of career: 0 is professor, 1 is assistant professor, 2 is postdoc, and 3 is graduate student.

## Non-Refereed Publications

- K. Gebhardt 2003, “Influence of Black Holes on Stellar Orbits”, in “Carnegie Observatories Astrophysics Series, Vol. 1: Coevolution of Black Holes and Galaxies, ed. L.C. Ho (Pasadena: Carnegie Observatories)
- J. Kormendy, & K. Gebhardt 2000, “Supermassive Black Holes in Galactic Nuclei”, in “Relativistic Astrophysics: 20th Texas Symposium”, eds. J.C. Wheeler, H. Martel. (New York: AIP), 363–381
- K. Gebhardt 1999, “Central Black Holes and Galaxy Evolution”, in “ESO Black Holes in Binaries and Galactic Nuclei”, eds L. Kaper, E. van den Heuvel, P. Woudt (ESO: Springer), 259–264
- D. Richstone, K. Gebhardt et al. 1996, “The Centers of Galaxies”, in Dynamical Evolution of Star Clusters, ed. P. Hut and J. Makino (IAU)
- D. Merritt, & K. Gebhardt 1994, “Cluster Dynamics and Cluster Masses”, in Clusters of Galaxies, Proceedings of the XXIXth Rencontre de Moriond, ed F. Duret, A. Mazure, and J. Tran Thanh Van (Editions Frontier, Singapore), p.11
- K. Gebhardt, C. Pryor, T.B. Williams, & J.E. Hesser 1993, “The Inner Velocity Structure of M15 Measured with a Fabry-Perot”, in Structure and Dynamics of Globular Clusters, ed. S.G. Djorgovski and G. Meylan (ASP), p.77

## Grants

- 2006: \$98,000 Texas Higher Education Coordinating Board  
“The Hobby-Eberly Telescope Dark Energy Experiment”\*
- 2005: \$1,575 Space Telescope Science Institute  
“The Compact Disk of Blue Stars Orbiting M31 Black Hole”\*
- 2005: \$43,901 Space Telescope Science Institute  
“Black Holes in Big Galaxies with Small Bulges”
- 2005: \$19,892 Space Telescope Science Institute  
“Black Hole Web Site for Teachers, Students, and the Public”
- 2004: \$400,336 National Science Foundation  
“CAREER: Dark Matter and Black Holes, Deconstructing Galaxies”
- 2004: \$59,978 Space Telescope Science Institute  
“Surface Brightness Profiles for LMC/SMC Clusters”
- 2004: \$13,340 Space Telescope Science Institute  
“The Biggest Galaxies in the Universe: Double Trouble”\*
- 2003: \$79,737 Space Telescope Science Institute  
“Search for Black Holes in M31 Globular Clusters”
- 2003: \$19,905 Space Telescope Science Institute  
“Black Holes in Big Galaxies with Small Bulges”\*

- 2002: \$59,720 Space Telescope Science Institute  
“Surface Brightness Profiles of Globular Clusters”
- 2002: \$11,570 Space Telescope Science Institute  
“High Spatial Resolution Spectroscopy of G1”\*
- 2001: \$96,000 Texas Advanced Research Program  
“The Dynamical Structure of Nearby Galaxies”
- 2001: \$17,401 Space Telescope Science Institute  
“The Smallest Nuclear Black Holes”\*
- 2001: \$27,073 Space Telescope Science Institute  
“The Biggest Black Holes”\*
- 2000: \$27,974 Space Telescope Science Institute  
“Orbital Structure and Black Hole in NGC3379”
- 2000: \$42,130 Space Telescope Science Institute  
“The Fundamental Plane of Nuclear Black Holes”\*
- 2000: \$12,201 Space Telescope Science Institute  
“Elliptical Galaxies with Nuclear Disks of Stars”\*
- 1999: \$3,781 Space Telescope Science Institute  
“Geometric Distances of Globular Clusters”\*
- 1997: \$300,000 Space Telescope Science Institute  
Hubble Fellowship
- 1996: \$10,050 Space Telescope Science Institute  
“Photometry for M28 and NGC5286”
- 1996: \$9,150 Space Telescope Science Institute  
“Black Holes and the Centers of Galaxies”\*

I am PI with sole authority over all grants listed above. The grants marked with an asterisk are those with Co-Is at other institutions with separate budgets.

### **Financial Support from Private Donors and Institutions**

- 2006-present: \$25,000,000 Various private, State, Institutions  
Contribution to Hobby-Eberly Telescope Dark Energy Experiment

## Invited Talks and Reviews

Sept 2, 2009 : University of Florida Colloquium  
June 8, 2009 : Review on Adaptive Optics Science at AAS, Pasadena  
April 22, 2009 : UCLA Colloquium  
April 21, 2009 : Carnegie Observatories Colloquium  
April 3, 2009 : Irvine Meeting on IMBH  
March 30, 2009 : Review at Cook's Branch Meeting  
Oct 10, 2008 : Review at Leopoldina Conference, Munich  
May 8, 2008 : Ludwig-Maximilians-Universitaet (Munich) Colloquium  
March 7, 2008 : Rutgers University Colloquium  
Feb 22, 2008 : NRAO Colloquium  
Feb 21, 2008 : Dark Matter 08 Invited Talk  
Feb 5, 2008 : Carnegie Observatories Colloquium  
Sept 8, 2007 : IAU 246 Invited Review  
Sept 4, 2007 : MPA talk  
Feb 22, 2007 : Oklahoma State University Colloquium  
Feb 9, 2007 : Princeton University Colloquium  
Jan 1, 2007 : Texas Academy of Medicine, Engineering, Science & Technology Lecture  
Oct 13, 2006 : City of Rochester OASIS Group Lecture  
Sept 8, 2006 : University of Texas School of Architecture Lecture  
Aug 18, 2006 : Invited Review at IAU, Prague  
July 7, 2006 : MPE Garching Colloquium  
June 8, 2006 : Goettingen University Colloquium  
May 17, 2006 : Invited Reviews (2) at Cambridge Black Hole Conference  
Apr 11, 2006 : Invited Review at the Mitchell Cosmology Symposium, Texas A&M  
Mar 1, 2006 : Invited Review at Ringberg Castle  
Feb 24, 2006 : Astrophysical Institut Potsdam Colloquium  
Feb 7, 2006 : Oxford University Colloquium  
Feb 2, 2006 : Leiden University Colloquium  
Feb 1, 2006 : Nijmegen University Colloquium  
Oct 27, 2005 : Munich Joint Astronomy Colloquium  
Oct 10, 2005 : Invited Review at ESO 3D Symposium  
Sept 1, 2005 : Astrophysical Institut Potsdam Talk  
Dec 14, 2004 : Invited Review at the Texas Symposium at Stanford  
Dec 9, 2004 : Texas Tech University Colloquium  
Nov 18, 2004 : Cleveland Museum of Natural History Lecture Series  
Nov 18, 2004 : Case Western University Colloquium  
Aug 12, 2004 : SLAC Colloquium  
July 27, 2004 : Leiden meeting on Black Hole Modeling talk  
June 17, 2004 : Aspen Center for Physics Colloquium  
May 26, 2004 : Invited Review at Gemini Worskhop (Vancouver)  
May 21, 2004 : Invited Review at Center for Gravitation Wave Physics (Penn State)  
March 12, 2004 : UC Santa Cruz Colloquium  
Nov 11, 2003 : Carnegie (Pasadena) Colloquium

Oct 31, 2003 : LIGO Group (Caltech) Colloquium  
Oct 20, 2003 : Invited Review at Center for Gravitation Wave Physics (Penn State)  
Aug 18-22, 2003 : Invited Review at ETH (Zurich) Galaxy Evolution Meeting  
June 27-28, 2003 : Panel member for Gemini Observatory Workshop (Aspen)  
May 5, 2003 : Space Telescope Symposium, Invited Review  
April 16, 2003 : UCLA Colloquium  
April 7, 2003 : Canadian Institute for Theoretical Astrophysics Colloquium  
March 26, 2003 : Lakeway Club Lecture Series  
March 12, 2003 : Columbia Colloquium  
March 11, 2003 : Princeton Colloquium  
March 4, 2003 : Morrison Planetarium, Benjamin Dean Lecture (San Francisco)  
Jan 29, 2003 : UC Santa Cruz Colloquium  
Jan 27-31, 2003 : Invited Talk at Globular Cluster Meeting at UCSB/ITP  
Dec 20, 2002 : Max-Planck-Institute Colloquium (Garching)  
Nov 6, 2002 : Caltech Colloquium  
Oct 31, 2002 : Invited Talk at Tex-Mex Conference in Mexico City  
Oct 12-25, 2002 : Invited Review at Carnegie Black Hole Meeting  
Sept, 2002 : Space Science Update on Black Holes in Globulars  
Aug 22, 2002 : Invited Review at SPIE meeting in Hawaii  
Feb 25-28, 2002 : Conference Organizer/Review "Black Holes" at UCSB/ITP  
Jan 18, 2002 : University of New Mexico Colloquium  
Jan 17, 2002 : University of Arizona Colloquium  
Aug 20, 2001 : Kapetyn Institute Colloquium  
Aug 13-16, 2001 : Conference Organizer/Review "Omega Cen" at Cambridge  
June, 2001 : American Astronomical Society Invited Talk  
March, 2001 : Rice University Colloquium  
Feb, 2001 : Trinity College Colloquium  
Jan, 2001 : University of California, Berkeley Colloquium  
Dec, 2000 : Texas Symposium (2000), Invited Review  
Feb, 2000 : University of Delaware Colloquium  
Feb, 2000 : University of Texas Colloquium  
Jan, 2000 : Harvard University Colloquium  
Aug, 1999 : ESO, invited review talk BH99 meeting  
May, 1999 : ESO, Garching, Germany Colloquium  
May, 1999 : Universitaets-Sternwarte Munich Colloquium  
May, 1999 : ARI, Heidelberg, Germany Colloquium  
Jan, 1999 : University of Michigan Colloquium  
Sept, 1998 : University of Washington Colloquium  
Sept, 1998 : Dominion Astrophysical Observatory Colloquium  
Sept, 1998 : University of British Columbia Colloquium  
Oct, 1995 : University of Geneva, Switzerland Colloquium  
May, 1995 : Michigan State University Colloquium