

Aaron J. Barth

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Employment

Assistant Professor, University of California, Irvine	2004 – present
Hubble Fellow, California Institute of Technology	2001 – 2004
CfA Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics	1998 – 2001

Education

Ph.D. in Astronomy, University of California, Berkeley	1998
Research Advisor: Professor Alexei Filippenko	
M.S. in Physics, University of Chicago	1992
B.S. in Physics, <i>summa cum laude</i> , Yale University	1990

Primary Research Interests

- Detection of supermassive black holes in galaxy centers
- Demographics and evolution of supermassive black holes
- Physical properties of active galactic nuclei and quasars
- Structure, morphology, and dynamics of galaxies

Awards and Honors

NSF Faculty Early Career Development (CAREER) Award	2006
Hubble Fellowship	2001–2004
UC Berkeley Alumni Club of San Francisco Scholarship	1997
Dorothea Klumpke-Roberts Prize, UC Berkeley Department of Astronomy	1996
Phi Beta Kappa, Yale University	1990
Eastman Kodak Scholarship, Yale University	1988-1990
American Honda Foundation Scholarship, Yale University	1986-1987

Professional Society Memberships

- American Astronomical Society
- International Astronomical Union

Observing Experience

Experience in ultraviolet, optical, and near-infrared observing and data analysis:

- Hubble Space Telescope
- Lick Observatory 120-inch and 40-inch Telescopes
- Keck Observatory
- Palomar 200-inch Telescope
- MMT Observatory
- Las Campanas Observatory, du Pont 2.5m Telescope

Service on Telescope Time Allocation Committees

<i>Chandra</i> X-ray Observatory Cycle 9 proposal review	June 2007
Hubble Space Telescope Cycle 14 proposal review	March 2005
Caltech TAC for Keck and Palomar Observatories	Fall 2003
Palomar 60-inch telescope TAC	Fall 2002
Hubble Space Telescope Cycle 11 proposal review panels	November 2001
Harvard-Smithsonian Center for Astrophysics optical/infrared TAC	Spring 2001

Invited Talks and Colloquia

Science in the Era of the Thirty Meter Telescope, Irvine	July 2007
Colloquium, UC San Diego Center for Astrophysics and Space Science	March 2007
Colloquium, Herzberg Institute of Astrophysics	December 2006
Conference on The History of Nuclear Black Holes in Galaxies, CfA	May 2006
Active Galactic Nuclei Conference, Tel Aviv University	February 2006
Colloquium, LLNL Institute for Geophysics and Planetary Physics	October 2005
Colloquium, Ohio State University	September 2005
Colloquium, Ohio University	September 2005
Center for Gravitational-Wave Physics Workshop, Penn State	May 2004
IAU Symposium 222, Gramado, Brazil	March 2004
Hubble Symposium, STScI	December 2003
Colloquium, UC Irvine	March 2003
Carnegie Symposium on Coevolution of Black Holes and Galaxies	October 2002
Colloquium, UCLA	April 2002
Colloquium, UC Irvine	February 2002
Hubble Symposium, STScI	October 2001
Elba Conference on Issues in Unification of AGN	May 2001
Colloquium, UC Santa Cruz	March 2001
Colloquium, MIT	February 2001

Aaron J. Barth: Publications

Refereed Publications

1. “Transient and Highly Polarized Double-Peaked H α Emission in the Seyfert 2 Nucleus of NGC 2110.” E. C. Moran, A. J. Barth, M. Eracleous, & L. E. Kay. 2007, *The Astrophysical Journal Letters*, 668, L31.
2. “Serendipitous XMM-Newton Discovery of a Cluster of Galaxies at $z = 0.28$.” F. Gastaldello, D. A. Buote, P. J. Humphrey, L. Zappacosta, M. S. Seigar, A. J. Barth, F. Brighenti, & W. G. Mathews. 2007, *The Astrophysical Journal*, 662, 923–926.
3. “A Normal Stellar Disk in the Galaxy Malin 1.” A. J. Barth. 2007, *The Astronomical Journal*, 133, 1085–1091.
4. “The Survey of Nearby Nuclei with STIS (SUNNS): Emission-Line Nuclei at Hubble Space Telescope Resolution.” J. C. Shields, H.-W. Rix, M. Sarzi, A. J. Barth, A. V. Filippenko, L. C. Ho, D. H. McIntosh, G. Rudnick, & W. L. W. Sargent. 2007, *The Astrophysical Journal*, 654, 125–137.
5. “Temporal Variation in Excited Fe $^+$ Near a GRB Afterglow.” M. Dessauges-Zavadsky, H.-W. Chen, J. X. Prochaska, J. S. Bloom, & A. J. Barth. 2006, *The Astrophysical Journal Letters*, 648, L89–L92.
6. “Constraining Dark Matter Halo Profiles and Galaxy Formation Models Using Spiral Arm Morphology. I. Method Outline.” M. S. Seigar, J. S. Bullock, A. J. Barth, & L. C. Ho. 2006, *The Astrophysical Journal*, 645, 1012–1023.
7. “Is the Broad-Line Region Clumped or Smooth? Constraints from the H α Profile of NGC 4395, the Least Luminous Seyfert 1 Galaxy.” A. Laor, A. J. Barth, L. C. Ho, & A. V. Filippenko. 2005, *The Astrophysical Journal*, 636, 83–89.
8. “Closing in on a Short-Hard Burst Progenitor: Constraints from Early-Time Optical Imaging and Spectroscopy of a Possible Host Galaxy of GRB 050509b.” J. S. Bloom, J. X. Prochaska, D. Pooley, C. W. Blake, R. J. Foley, S. Jha, E. Ramirez-Ruiz, J. Granot, A. V. Filippenko, S. Sigurdsson, A. J. Barth, H.-W. Chen, M. C. Cooper, E. E. Falco, R. R. Gal, B. F. Gerke, M. D. Gladders, J. E. Greene, J. Hennenwi, L. C. Ho, K. Hurley, B. P. Koester, W. Li, L. Lubin, J. Newman, D. A. Perley, G. K. Squires, & W. M. Wood-Vasey. 2006, *The Astrophysical Journal*, 638, 354–368.
9. “The Stellar Populations in the Central Parsecs of Galactic Bulges.” M. Sarzi, H.-W. Rix, J. C. Shields, L. C. Ho, A. J. Barth, G. Rudnick, A. V. Filippenko, & W. L. W. Sargent. 2005, *The Astrophysical Journal*, 628, 169–186.
10. “Dwarf Seyfert 1 Nuclei and the Low-Mass End of the $M_{\text{BH}} - \sigma$ Relation.” A. J. Barth, J. E. Greene, & L. C. Ho. 2005, *The Astrophysical Journal Letters*, 619, L151–L154.
11. “POX 52: A Dwarf Seyfert 1 Galaxy with an Intermediate-Mass Black Hole.” A. J. Barth, L. C. Ho, R. E. Rutledge, & W. L. W. Sargent. 2004, *The Astrophysical Journal*, 607, 90–102.
12. “Spectropolarimetry and Modeling of the Eclipsing T Tauri Star KH 15D.” E. Agol, A. J. Barth, S. Wolf, & D. Charbonneau. 2004, *The Astrophysical Journal*, 600, 781–788.
13. “Iron Emission in the $z = 6.4$ Quasar SDSS J114816.64+525150.3.” A. J. Barth, P. Martini, C. H. Nelson, & L. C. Ho. 2003, *The Astrophysical Journal Letters*, 594, L95–98.
14. “Early optical emission from the γ -ray burst of 4 October 2002.” D. W. Fox *et al.* (21 authors). 2003, *Nature*, 422, 284–286.
15. “Optical Spectropolarimetry of the GRB 020813 Afterglow.” A. J. Barth, R. Sari, M. H. Cohen, R. W. Goodrich, P. A. Price, D. W. Fox, J. S. Bloom, A. M. Soderberg, & S. R. Kulkarni. 2003, *The Astrophysical Journal Letters*, 584, L47–51.

16. "Emission and Absorption in the M87 LINER." B. M. Sabra, J. C. Shields, L. C. Ho, A. J. Barth, & A. V. Filippenko. 2003, *The Astrophysical Journal*, 584, 164–175.
17. "The Black Hole Masses and Host Galaxies of BL Lacertae Objects." A. J. Barth, L. C. Ho, & W. L. W. Sargent. 2003, *The Astrophysical Journal*, 583, 134–144.
18. "A Study of the Direct Fitting Method for Measurement of Galaxy Velocity Dispersions." A. J. Barth, L. C. Ho, & W. L. W. Sargent. 2002, *The Astronomical Journal*, 124, 2607–2614.
19. "Optical and Ultraviolet Spectroscopy of SN 1995N: Evidence for Strong Circumstellar Interaction." C. Fransson, R. A. Chevalier, A. V. Filippenko, B. Leibundgut, A. J. Barth, R. A. Fesen, R. P. Kirshner, D. C. Leonard, W. Li, P. Lundquist, J. Sollerman, & S. D. Van Dyk. 2002, *The Astrophysical Journal*, 572, 350–370.
20. "Limits on the Mass of the Central Black Hole in 16 Nearby Bulges." M. Sarzi, H.-W. Rix, J. C. Shields, D. H. McIntosh, L. C. Ho, G. Rudnick, A. V. Filippenko, W. L. W. Sargent, & A. J. Barth. 2002, *The Astrophysical Journal*, 567, 237–246.
21. "Stellar Velocity Dispersion and Black Hole Mass in the Blazar Markarian 501." A. J. Barth, L. C. Ho, & W. L. W. Sargent. 2002, *The Astrophysical Journal Letters*, 566, L13–16.
22. "An Efficient Strategy to Select Targets for Gas-Dynamical Measurements of Black Hole Masses Using the Hubble Space Telescope." L. C. Ho, M. Sarzi, H.-W. Rix, J. C. Shields, G. Rudnick, A. V. Filippenko, & A. J. Barth. 2002, *Publications of the Astronomical Society of the Pacific*, 114, 137–143.
23. "The Distance to SN 1999em in NGC 1637 from the Expanding Photosphere Method." D. C. Leonard, A. V. Filippenko, E. L. Gates, W. Li, R. G. Eastman, A. J. Barth, *et al.* (16 authors). 2002, *Publications of the Astronomical Society of the Pacific*, 114, 35–64.
24. "A Composite Seyfert 2 X-ray Spectrum: Implications for the Origin of the Cosmic X-ray Background." E. C. Moran, L. E. Kay, M. Davis, A. V. Filippenko, & A. J. Barth. 2001, *The Astrophysical Journal Letters*, 556, L75–78.
25. "Evidence for a Supermassive Black Hole in the S0 Galaxy NGC 3245." A. J. Barth, M. Sarzi, H.-W. Rix, L. C. Ho, A. V. Filippenko, & W. L. W. Sargent. 2001, *The Astrophysical Journal*, 555, 685–708.
26. "An Ultraviolet through Infrared Look at Star Formation and Super Star Clusters in Two Circumnuclear Starburst Rings." D. Maoz, A. J. Barth, L. C. Ho, A. Sternberg, & A. V. Filippenko. 2001, *The Astronomical Journal*, 121, 3048–3074.
27. "The Broad-Line and Narrow-Line Regions of the LINER NGC 4579." A. J. Barth, L. C. Ho, A. V. Filippenko, H.-W. Rix, & W. L. W. Sargent. 2001, *The Astrophysical Journal*, 546, 205–209.
28. "LINER/H II 'Transition' Nuclei and the Nature of NGC 4569." A. J. Barth & J. C. Shields. 2000, *Publications of the Astronomical Society of the Pacific*, 112, 753–767.
29. "The Frequency of Polarized Broad Emission Lines in Type 2 Seyfert Galaxies." E. C. Moran, A. J. Barth, L. E. Kay, & A. V. Filippenko. 2000, *The Astrophysical Journal Letters*, 540, L73–77.
30. "Detailed Analysis of Early to Late-Time Spectra of Supernova 1993J." T. Matheson, A. V. Filippenko, L. C. Ho, A. J. Barth, & D. C. Leonard. 2000, *The Astronomical Journal*, 120, 1499–1515.
31. "Optical Spectroscopy of Supernova 1993J During its First 2500 Days." T. Matheson *et al.* (18 authors) 2000, *The Astronomical Journal*, 120, 1487–1498.
32. "Evidence for Asphericity in the Type II_n Supernova 1998S." D. C. Leonard, A. V. Filippenko, A. J. Barth, & T. Matheson. 2000, *The Astrophysical Journal*, 536, 239–254.
33. "The Environments of Supernovae in Post-Refurbishment Hubble Space Telescope Images." S. D. Van Dyk, C. Y. Peng, A. J. Barth, & A. V. Filippenko. 1999, *The Astronomical Journal*, 118, 2331–2349.
34. "Polarized Broad-Line Emission from Low-Luminosity Active Galactic Nuclei." A. J. Barth, A. V. Filippenko, & E. C. Moran. 1999, *The Astrophysical Journal*, 525, 673–684.

35. “Polarized Narrow-Line Emission from the Nucleus of NGC 4258.” A. J. Barth, H. D. Tran, M. S. Brotherton, A. V. Filippenko, L. C. Ho, W. van Breugel, R. Antonucci, & R. W. Goodrich. 1999, *The Astronomical Journal*, 118, 1609–1617.
36. “Polarized Broad H α Emission from the LINER Nucleus of NGC 1052.” A. J. Barth, A. V. Filippenko, & E. C. Moran. 1999, *The Astrophysical Journal Letters*, 515, L61–64.
37. “Hubble Space Telescope WFPC2 Imaging of SN 1979C and its Environment.” S. D. Van Dyk, C. Y. Peng, A. J. Barth, A. V. Filippenko, R. A. Chevalier, R. A. Fesen, C. Fransson, R. P. Kirshner, & B. Leibundgut. 1999, *Publications of the Astronomical Society of the Pacific*, 111, 313–320.
38. “Steps toward Determination of the Size and Structure of the Broad-Line Region in Active Galactic Nuclei. XV. Long-Term Optical Monitoring of NGC 5548.” B. M. Peterson *et al.* (37 authors) 1999, *The Astrophysical Journal*, 510, 659–668.
39. “Steps toward Determination of the Size and Structure of the Broad-Line Region in Active Galactic Nuclei. XII. Ground-based Monitoring of 3C 390.3.” M. Dietrich *et al.* (58 authors) 1998, *The Astrophysical Journal Supplement*, 115, 185–202.
40. “A Search for Ultraviolet Emission from LINERs.” A. J. Barth, L. C. Ho, A. V. Filippenko, & W. L. W. Sargent. 1998, *The Astrophysical Journal*, 496, 133–144.
41. “Identification of a host galaxy at redshift $z = 3.42$ for the gamma-ray burst of 14 December 1997.” S. R. Kulkarni *et al.* (16 authors) 1998, *Nature*, 393, 35–39.
42. “Ultraviolet Emission from the LINER Nucleus of NGC 6500.” A. J. Barth, G. A. Reichert, L. C. Ho, J. C. Shields, A. V. Filippenko, & E. M. Puchnarewicz. 1997, *The Astronomical Journal*, 114, 2313–2322.
43. “Multiwavelength Monitoring of the BL Lacertae Object PKS 2155-304 in May 1994. I. The Ground-Based Campaign.” J. E. Pesce *et al.* (34 authors) 1997, *The Astrophysical Journal*, 486, 770–783.
44. “A Gamma-Ray Flare in NRAO 190.” T. A. McGlynn *et al.* (19 authors) 1996, *The Astrophysical Journal*, 481, 625–632.
45. “A Black Hole in the X-Ray Nova Ophiuchi 1977.” A. V. Filippenko, T. Matheson, D. C. Leonard, A. J. Barth, and S. D. Van Dyk. 1997, *Publications of the Astronomical Society of the Pacific*, 109, 461–467.
46. “The Ultraviolet Spectrum of the LINER NGC 4579.” A. J. Barth, G. A. Reichert, A. V. Filippenko, L. C. Ho, J. C. Shields, R. F. Mushotzky, & E. M. Puchnarewicz. 1996, *The Astronomical Journal*, 112, 1829–1838.
47. “Multiwavelength Observations of Short-Timescale Variability in NGC 4151. IV. Analysis of Multiwavelength Continuum Variability.” R. A. Edelson *et al.* (91 authors) 1996, *The Astrophysical Journal*, 470, 364–377.
48. “Multiwavelength Observations of Short-Timescale Variability in NGC 4151. II. Optical Observations.” S. Kaspi *et al.* (22 authors) 1996, *The Astrophysical Journal*, 470, 336–348.
49. “Hubble Space Telescope Ultraviolet Images of Five Circumnuclear Star-Forming Rings.” D. Maoz, A. J. Barth, A. Sternberg, A. V. Filippenko, L. C. Ho, F. D. Macchetto, H.-W. Rix, & D. P. Schneider. 1996, *The Astronomical Journal*, 111, 2248–2264.
50. “The Environments of Supernovae in Archival Hubble Space Telescope Images.” A. J. Barth, S. D. Van Dyk, A. V. Filippenko, B. Leibundgut, & M. W. Richmond. 1996, *The Astronomical Journal*, 111, 2047–2058.
51. “Optical Identification of Quasar 0917+7122 in the Direction of an Extreme Ultraviolet Source.” D. Maoz, E. Ofek, A. Shemi, A. J. Barth, A. V. Filippenko, M. S. Brotherton, B. J. Wills, D. Wills, & F. J. Lockman. 1996, *Astronomy & Astrophysics*, 308, 511–513.
52. “A Black Hole in the X-Ray Nova GS 2000+25.” A. V. Filippenko, T. Matheson, & A. J. Barth. 1995, *The Astrophysical Journal Letters*, 455, L139–142.

53. “Was Fritz Zwicky’s ‘Type V’ SN 1961V a Genuine Supernova?” A. V. Filippenko, A. J. Barth, G. C. Bower, L. C. Ho, G. S. Stringfellow, R. W. Goodrich, & A. C. Porter. 1995, *The Astronomical Journal*, 110, 2261–2273.
54. “The Type Ic Supernova 1994I in M51: Detection of Helium and Spectral Evolution.” A. V. Filippenko, A. J. Barth, *et al.* (18 authors) 1995, *The Astrophysical Journal Letters*, 450, L11–15.
55. “Hubble Space Telescope Observations of Circumnuclear Star-Forming Rings in NGC 1097 and NGC 6951.” A. J. Barth, L. C. Ho, A. V. Filippenko, & W. L. W. Sargent. 1995, *The Astronomical Journal*, 110, 1009–1018.
56. “The Peculiar Type II Supernova 1993J in M81: Transition to the Nebular Phase.” A. V. Filippenko, T. Matheson, & A. J. Barth. 1994, *The Astronomical Journal*, 108, 2220–2225.
57. “The Classical $SU(2)$ Invariance of the $SU(2)_q$ -Invariant XXZ Spin Chain.” D. G. Caldi, A. Chodos, Z. Zhu, & A. J. Barth. 1991, *Letters in Mathematical Physics*, 22, 163–165.

Invited Reviews

1. “Black Holes in Active Galaxies.” A. J. Barth. 2004, in *Carnegie Observatories Astrophysics Series, Vol. 1: Coevolution of Black Holes and Galaxies*, edited by L. C. Ho (Cambridge University Press), 21–36.
2. “Low-Luminosity AGNs and Unification.” A. J. Barth. 2002, in *ASP Conference Series Vol. 258, Issues in Unification of AGNs*, edited by R. Maiolino, A. Marconi, & N. Nagar, 147–158.

Conference Papers

1. “The Smallest AGN Host Galaxies.” J. E. Greene, A. J. Barth, & L. C. Ho. 2006, *New Astronomy Reviews*, 50, 739–742.
2. “Seyfert 2 Galaxies Uncovered with Keck Spectropolarimetry.” L. E. Kay, E. C. Moran, A. J. Barth, A. V. Filippenko, & A. M. Magalhaes. 2005, in *ASP Conference Series Vol. 343, Astronomical Polarimetry: Current Status and Future Directions*, edited by A. Adamson *et al.*, 505.
3. “SN 1994W: Evidence of Explosive Mass Ejection a Few Years Before Explosion.” N. N. Chugai, R. J. Cumming, S. I. Blinnikov, P. Lundquist, A. V. Filippenko, A. J. Barth, A. Bragaglia, D. C. Leonard, T. Matheson, & J. Sollerman. 2005, in *Cosmic Explosions, Proceedings of IAU Colloquium 192*, edited by J. M. Marcaide & K. W. Weller (Springer-Verlag), 111.
4. “Intermediate-Mass Black Holes in Active Galactic Nuclei.” A. J. Barth, J. E. Greene, & L. C. Ho. 2005, in *Growing Black Holes: Accretion in a Cosmological Context*, edited by A. Merloni, S. Nayakshin, & R. Sunyaev (Springer-Verlag), 154–158.
5. “Black Hole Masses in Active Galaxies.” A. J. Barth. 2004, in *The Interplay among Black Holes, Stars, and ISM in Galactic Nuclei: Proceedings of IAU Symposium No. 222*, edited by Th. Storchi-Bergmann, L. C. Ho, & H. R. Schmitt (Cambridge University Press), 3–8.
6. “Intermediate-mass Black Holes in Galactic Nuclei.” J.E. Greene, L.C. Ho, & A.J. Barth. 2005, in *The Interplay among Black Holes, Stars, and ISM in Galactic Nuclei: Proceedings of IAU Symposium No. 222*, edited by Th. Storchi-Bergmann, L. C. Ho, & H. R. Schmitt (Cambridge University Press), 33–36.
7. “The stellar populations in the central parsecs of galactic bulges.” M. Sarzi, H.-W. Rix, J. C. Shields, A. J. Barth, G. Rudnick, A. V. Filippenko, & W. L. W. Sargent. 2005, in *The Interplay among Black Holes, Stars, and ISM in Galactic Nuclei: Proceedings of IAU Symposium No. 222*, edited by Th. Storchi-Bergmann, L. C. Ho, & H. R. Schmitt (Cambridge University Press), 145–148.

8. "An Intermediate-Mass Black Hole in the Dwarf Seyfert 1 Galaxy POX 52." A. J. Barth, L. C. Ho, & W. L. W. Sargent. 2004, in ASP Conference Series Vol. 311, AGN Physics with the Sloan Digital Sky Survey, edited by G. T. Richards & P. B. Hall, 91.
9. "A Hubble Space Telescope Spectroscopic Survey of LINER/H II Transition Nuclei." A. J. Barth, L. C. Ho, & A. V. Filippenko. 2003, in ASP Conference Series Vol. 290, Active Galactic Nuclei: From Central Engine to Host Galaxy, edited by S. Collin *et al.*, 387.
10. "The Black Hole Masses and Host Galaxies of BL Lac Objects." A. J. Barth, L. C. Ho, & W. L. W. Sargent. 2004, in ASP Conference Series Vol. 290, Active Galactic Nuclei: From Central Engine to Host Galaxy, edited by S. Collin *et al.*, 601.
11. "*HST* Spectroscopy of the M87 Nucleus." J. C. Shields, B. M. Sabra, L. C. Ho, A. J. Barth, & A. V. Filippenko. 2004, in ASP Conference Series Vol. 290, Active Galactic Nuclei: From Central Engine to Host Galaxy, edited by S. Collin *et al.*, 401.
12. "Ultraviolet Absorption in LINERs." J. C. Shields, B. M. Sabra, L. C. Ho, A. J. Barth, & A. V. Filippenko. 2002, in ASP Conference Series Vol. 255, Mass Outflow in Active Galactic Nuclei: New Perspectives, edited by D. M. Crenshaw, S. B. Kraemer, & I. M. George, 105.
13. "Measuring Black Hole Masses Using Ionized Gas Kinematics." A. J. Barth, M. Sarzi, L. C. Ho, H.-W. Rix, J. C. Shields, A. V. Filippenko, G. Rudnick, & W. L. W. Sargent. 2001, in ASP Conference Series Vol. 249, The Central Kiloparsec of Starbursts and AGN: The La Palma Connection, edited by J. H. Knapen *et al.*, 370.
14. "ATV: An Image-Display Tool for IDL." A. J. Barth. 2001, in ASP Conference Series Vol. 238, Astronomical Data Analysis and Software Systems 2000, edited by F. A. Primini, F. R. Harnden, & H. E. Payne, 385.
15. "A WFPC2 Search for Ultraviolet Emission from LINERs." A. J. Barth, L. C. Ho, A. V. Filippenko, & W. L. W. Sargent. 1996, in ASP Conference Series Vol. 103, The Physics of LINERs in View of Recent Observations, edited by M. C. Eracleous *et al.*, 153.
16. "Hubble Space Telescope Images of Nuclear Rings in Barred Galaxies." A. J. Barth, L. C. Ho, A. V. Filippenko, V. Gorjian, M. A. Malkan, & W. L. W. Sargent. 1996, in ASP Conference Series Vol. 91, Barred Galaxies, edited by R. Buta *et al.*, 94.
17. "Multiwavelength Observations of PKS 2155-304 in May 1994: The Ground-Based Campaign." J. E. Pesce *et al.* (34 authors) 1996, in ASP Conference Series Vol. 110, Blazar Continuum Variability, edited by H. R. Miller, J. R. Webb, & J. C. Noble, 423.
18. "The Environments of Type Ib/c Supernovae." S. D. Van Dyk, A. J. Barth, & A. V. Filippenko. 1996, in the Proceedings of IAU Symposium 165, Compact Stars in Binaries, edited by J. van Paradijs, E. P. van den Heuvel, & E. Kullkers (Dordrecht: Kluwer), 135.

International Astronomical Union (IAU) Circulars

(<http://cfa-www.harvard.edu/cfa/ps/services/IAUC.html>)

Contributions to Circulars 5964, 5971, 6001, 6046, 6071, 6138, 6141, 6165, 6195, 6246, 6267, 6270, 6490, 6627, 6633, 6794, 6971, 7604, 7607, and 7829.

Gamma-ray Burst Coordinates Network (GCN) Circulars

(http://gcn.gsfc.nasa.gov/gcn/gcn3_archive.html)

Contributions to Circulars 1475, 1477, 1569, and 1620.