

**Name:**

Fiona Anne Harrison  
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**Professional Preparation**

1993 University of California, Berkeley	Ph.D. (Physics)
1985 Dartmouth College	A.B. <i>Magna cum laude</i> (Physics, with High Honors)

**Employment:**

8/2005 - present	Professor of Physics and Astronomy
12/2001 - 8/2005	Associate Professor of Physics and Astronomy
12/1995 - 12/2001	Assistant Professor of Physics, California Institute of Technology
12/1993 - 12/1995	Robert A. Millikan Research Fellow, California Institute of Technology
1/1988 - 11/1993	Research Assistant, Space Sciences Laboratory and Department of Physics University of California, Berkeley

**Fellowships and Awards:**

2000 - Presidential Early Career Award  
1993 - Robert A. Millikan Prize Fellowship in Experimental Physics  
1989 - 1992 NASA Graduate Student Research Fellow  
1985 - Phi Beta Kappa  
1985 - High Honors in Physics, Dartmouth College

**Hardware Projects:**

Principal Investigator: *Nuclear Spectroscopic Telescope Array (NuSTAR)* Small Explorer  
Principal Investigator: *NASA High-Energy Focusing Telescope* Balloon Payload

**Research Interests:**

Stellar-mass and supermassive black holes; gamma-ray bursts; supernovae  
Detector and optics development for high-energy astrophysical telescopes

**Professional Service (selected):**

AAS High Energy Astrophysics Division Executive Committee  
Beyond Einstein Program Assessment Committee (NRC)  
From Quarks to the Cosmos NRC Study  
Spitzer Science Center and Michelson Science Center Oversight Committees

**Institute Service (selected):**

Member, Presidential Search Committee  
Co-chair, Physics Staffing committee; Chair, Caltech Observatory Council

**Graduate Students:**

Peter Mao (PhD 2002), Sarah Yost (PhD 2004), Megan Eckart, Hubert Chen, Brad Cenko.

**Affiliations:**

American Astronomical Society, American Physical Society

Publications in unrefereed journals and conference proceedings indicated by a \*.  
Selected conference papers only.

**Publications**

- [1] S. B. Cenko, M. Kasliwal, F. A. Harrison, V. Pal'shin, D. A. Frail, P. B. Cameron, E. Berger, D. B. Fox, A. Gal-Yam, S. R. Kulkarni, D.-S. Moon, E. Nakar, E. O. Ofek, B. E. Penprase, P. A. Price, R. Sari, B. P. Schmidt, A. M. Soderberg, R. Aptekar, D. Frederiks, S. Golenetskii, D. N. Burrows, R. A. Chevalier, N. Gehrels, P. J. McCarthy, J. A. Nousek, and T. Piran. Multiwavelength Observations of GRB 050820A: An Exceptionally Energetic Event Followed from Start to Finish. *ApJ*, 652:490–506, November 2006.
- [2] S. B. Cenko, D. B. Fox, D.-S. Moon, F. A. Harrison, S. R. Kulkarni, J. R. Henning, C. D. Guzman, M. Bonati, R. M. Smith, R. P. Thicksten, M. W. Doyle, H. L. Petrie, A. Gal-Yam, A. M. Soderberg, N. L. Anagnostou, and A. C. Laity. The Automated Palomar 60 Inch Telescope. *PASP*, 118:1396–1406, October 2006.
- [3] M. E. Eckart, D. Stern, D. J. Helfand, F. A. Harrison, P. H. Mao, and S. A. Yost. The Serendipitous Extragalactic X-Ray Source Identification (SEXSI) Program. III. Optical Spectroscopy. *ApJS*, 165:19–56, July 2006.
- [4] F. A. Harrison, F. E. Christensen, W. Craig, C. Hailey, W. Baumgartner, C. M. H. Chen, J. Chonko, W. R. Cook, J. Koglin, K.-K. Madsen, M. Pivovarov, S. Boggs, and D. Smith. Development of the HEFT and NuSTAR focusing telescopes. *Experimental Astronomy*, pages 42–+, 2006.
- [5] E. Berger, S. R. Kulkarni, D. B. Fox, A. M. Soderberg, F. A. Harrison, E. Nakar, D. D. Kelson, M. D. Gladders, J. S. Mulchaey, A. Oemler, A. Dressler, S. B. Cenko, P. A. Price, B. P. Schmidt, D. A. Frail, N. Morrell, S. Gonzalez, W. Krzeminski, R. Sari, A. Gal-Yam, D.-S. Moon, B. E. Penprase, R. Jayawardhana, A. Scholz, J. Rich, B. A. Peterson, G. Anderson, R. McNaught, T. Minezaki, Y. Yoshii, L. L. Cowie, and K. Pimblet. Afterglows, Redshifts, and Properties of Swift Gamma-Ray Bursts. *Astrophysical Journal*, 634:501–508, November 2005.
- [6] D. Stern, S. A. Yost, M. E. Eckart, F. A. Harrison, D. J. Helfand, S. G. Djorgovski, S. Malhotra, and J. E. Rhoads. A Galaxy at  $z = 6.545$  and Constraints on the Epoch of Reionization. *ApJ*, 619:12–18, January 2005.
- [7] M. E. Eckart, E. S. Laird, D. Stern, P. H. Mao, D. J. Helfand, and F. A. Harrison. The Serendipitous Extragalactic X-Ray Source Identification (SEXSI) Program. II. Optical Imaging. *ApJS*, 156:35–45, January 2005.

- [8] M. Sako, F. A. Harrison, and R. Rutledge. A Search for Discrete X-ray Spectral Features in a Sample of Bright Gamma-Ray Burst Afterglows. *ApJ*, 617, 2004.
- [9] D. H. Hartmann, J. Grindlay, D. Band, R. Blandford, W. Craig, G. J. Fishman, N. Gehrels, F. Harrison, J. Hong, C. Kouveliotou, A. Loeb, and S. E. Woosley. Tracing cosmic star formation with EXIST. *New Astronomy Review*, 48:237–241, February 2004.
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- [11] C. A. H. Chen, W. R. Cook, F. A. Harrison, and J.Y.Y Lin. Characterization of a large-format, fine-pitch CdZnTe pixel detector for the HEFT balloon-born experiment. *IEEE TNS*, 51:2472, 2003.
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- [14] S. A. Yost, F. A. Harrison, R. Sari, and D. A. Frail. A Study of the Afterglows of Four GRBs: Constraining the Explosion and Fireball Mechanism. *ApJ*, 597:459, 2003.
- [15] D. L. Windt, S. Donguy, C. J. Hailey, J. Koglin, V. Honkimaki, E. Ziegler, F. E. Christensen, H. Chen, F. A. Harrison, and W. W. Craig. W /SiC X-Ray Multilayers Optimized for Use Above 100 KeV. *Applied Optics*, 42:2415–2421, May 2003.
- [16] P. A. Price, S. R. Kulkarni, E. Berger, D. W. Fox, J. S. Bloom, S. G. Djorgovski, D. A. Frail, T. J. Galama, F. A. Harrison, P. McCarthy, D. E. Reichart, R. Sari, S. A. Yost, H. Jerjen, K. Flint, A. Phillips, B. E. Warren, T. S. Axelrod, R. A. Chevalier, J. Holtzman, R. A. Kimble, B. P. Schmidt, J. C. Wheeler, F. Frontera, E. Costa, L. Piro, K. Hurley, T. Cline, C. Guidorzi, E. Montanari, E. Mazets, S. Golenetskii, I. Mitrofanov, D. Anfimov, A. Kozyrev, M. Litvak, A. Sanin, W. Boynton, C. Fellows, K. Harshman, C. Shinohara, A. Gal-Yam, E. Ofek, and Y. Lipkin. Discovery of GRB 020405 and Its Late Red Bump. *ApJ*, 589:838–843, June 2003.
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