Joshua Simon Bloom
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Professional Preparation

Harvard College Cambridge, Massachusetts, USA	*Astronomy and Astrophysics and Physics*	A.B. 1996 Magna Cum Laude
Cambridge University Cambridge, England	*Astronomy*	M.Phil 1997
California Institute of Technology Pasadena, California	*Astronomy*	Ph.D. 2002
Harvard University Cambridge, Massachusetts, USA	*Astrophysics*	2002-2005 Harvard Society of Fellows (JF)

Appointments & Awards

Associate Professor of Astronomy, University of California, Berkeley (2008-present)
Physics Faculty Scientist, Lawrence Berkeley National Laboratory, Berkeley, CA (2011-present)
Sofia and Tycho Brahe Professorship, Copenhagen University, Denmark (2010-present)
Newton Lacy Pierce Prize, American Astronomical Society (2009)
Sloan Foundation Fellow (2006-2010)
Assistant Professor of Astronomy, University of California, Berkeley (2005-2008)
Junior Fellow, Harvard Society of Fellows, Harvard University (2002-2005)
Hertz Foundation Fellow, California Institute of Technology (1999-2002)
Herschel Smith Harvard Fellow, Cambridge University (Emmanuel College) (1996-1997)

Related Publications

J. S. Bloom, J. W. Richards *"Data Mining and Machine-Learning in Time-Domain Discovery & Classification*" chapter in "Advances in Machine Learning and Data Mining for Astronomy," eds. Michael Way, Jeff Scargle, Kamal Ali, Ashok Srivastava, Chapman and Hall publisher, in press (2011) http://arxiv.org/abs/1104.3142

J. S. Bloom, J. W. Richards, P. E. Nugent, R. M. Quimby, M. M. Kasliwal, D. L. Starr, D. Poznanski, E. O. Ofek, S. B. Cenko, N. R. Butler, S. R. Kulkarni, A. Gal-Yam, N. Law "*Automating Discovery and Classification of Transients and Variable Stars in the Synoptic Survey Era*," **Publications of the Astronomical Society of the Pacific**, submitted (2011) http://arxiv.org/abs/1106.5491

J. W. Richards, D. L. Starr, N. R. Butler, J. S. Bloom, J. M. Brewer, A. Crellin-Quick, J. Higgins, R. Kennedy, M. Rischard *"On Machine-learned Classification of Variable Stars with Sparse and Noisy Time-series Data"* ***Astrophysical Journal,*** v733, p. 10 (2011)

N. R. Butler, **J. S. Bloom**, "Optimal Time-series Selection of Quasars" **Astronomical Journal,** v141, p. 93 (2011)

W. Li, **J. S. Bloom**, P. Podsiadlowski, A. A. Miller, S. B. Cenko, S. W. Jha, M. Sullivan, D. A. Howell, P. E. Nugent, N. R. Butler, E. O. Ofek, M. M. Kasliwal, J. W. Richards, A. Stockton, H.-Yi Shih, L. Bildsten, M. M. Shara, J. Bibby, A. V. Filippenko, M. Ganeshalingam, J. M. Silverman, S. R. Kulkarni, N. M. Law, D. Poznanski, R. M. Quimby, C. McCully, B. Patel, K. Maguire *"Constraints on the Progenitor System of the Type Ia Supernova SN 2011fe/PTF11kly"*, **Nature**, submitted (2011)

Significant Publications

J. S. Bloom, D. Giannios, B. D. Metzger, S. B. Cenko, D. A. Perley, N. R. Butler, N. R. Tanvir, A. J. Levan, P. T. O' Brien, L. E. Strubbe, F. De Colle, E. Ramirez-Ruiz, W. H. Lee, S. Nayakshin, E. Quataert, A. R. King, A. Cucchiara, J. Guillochon, G. C. Bower, A. S. Fruchter, A. N. Morgan, A. J. van der Horst "*A Possible Relativistic Jetted Outburst from a Massive Black Hole Fed by a Tidally Disrupted Star*" **Science** v333, 203 (2011) http://adsabs.harvard.edu/abs/2011Sci...333..203B

J. S. Bloom, J. X. Prochaska, D. Pooley, C. H. Blake, R. J. Foley, Jha, S., Ramirez-Ruiz, E., Granot, J., Filippenko, A. V., Sigurdsson, S., Barth, A. J., Chen, H.-W., Cooper, M. C., Falco, E. E., Gal, R. R., Gerke, B. F., Gladders, M. D., Greene, J. E., Hennanwi, J., Ho, L. C., Hurley, K., Koester, B. P., Li, W., Lubin, L., Newman, J., Perley, D. A., Squires, G. K., Wood-Vasey, W. M. "*Closing in on a Short-Hard Burst Progenitor: Constraints from Early-Time Optical Imaging and Spectroscopy of a Possible Host Galaxy of GRB 050509b*" ***Astrophysical Journal,*** v638, pp. 354–368 (2006) http://adsabs.harvard.edu/abs/2006ApJ...638..354B

J. S. Bloom *"What are Gamma-Ray Bursts?"* Princeton University Press, 280 pp., ISBN: 9781400837007 (2011)

Synergistic Activities

- Recent Public Astronomy Lectures: California Academy of Sciences, Chabot Space and Science Center, San Mateo Astronomical Society, Silicon Valley Astronomer Lecture Series
- *National-level service:* Member of the Observatories Council, an AURA/NSF oversight and advocation group for the National Optical Astronomy Observatories (NOAO); Former member of the Advisory Board of Las Cumbres Observatory Global Telescope Network (LCOGTN); Chair, Keck Observatory Time Domain Working Group and Chair, NASA/EXIST GRB Working Group
- co-PI of NSF Dynamic Data Driven Applications Systems-TMRP ("Real-Time Astronomy with a Rapid-Response Telescope Grid") (2005 - 2008). Bloom was the creator behind the newly adopted international standard for real-time transients communications protocols (VOEvent).

Collaborators & Other Affiliations

(Note: Other co-authors not listed below are those with whom I had little to no interaction)

A. Adams (MIT), C. Bailyn (Yale University), A. Barth (UC Irvine), S. Barthlemy (GSFC), C. H. Blake (Harvard/CfA), N. R. Butler (UC Berkeley), H-W Chen (University of Chicago), B. S. Gaudi (Ohio State Univ.), Andrea Ghez (UCLA), E. Falco (Harvard/CfA), E. Fenimore (Los Alamos National Laboratory), A. Filippenko (UC Berkeley), R. Foley (UC Berkeley), D. Frail (NRAO), J. Fynbo (Copenhagen), N. Gehrels (GSFC), J. Granot (Stanford University), J. Hjorth (Copenhagen), K. Hurley (UC Berkeley), S. Jha (Rutgers), D. Kocevski (UC Berkeley), S. R. Kulkarni (Caltech), Weidong Li (UC Berkeley), L. Lubin (UC Davis), P. Mazalli (Max Planck), Peter Nugent (Lawrence Berkeley Laboratory), D. Perley (UC Berkeley), S. Perlmutter (Lawrence Berkeley Laboratory), D. Pooley (UC Berkeley), J. X. Prochaska (UC Santa Cruz), E. Ramirez-Ruiz (UC Santa Cruz), A. Rau (Caltech), A. G. Riess (JHU), S. Sigurdsson (Penn State University), M. Skrutskie (U. Virginia), G. Squires (JPL), D. L. Starr (UC Berkeley/LCOGT), D. S. Stern (JPL) , A. Szentgyorgyi (Smithsonian Center for Astrophysics), P. van Dokkum (Yale University), R. Williams (Caltech), L. Walkowicz (UC Berkeley), S. Woosley (UC Santa Cruz)

Graduate advisors	Martin J. Rees, Cambridge University & Shrinivas R. Kulkarni, Caltech
Postdoctoral Sponsors	N/A (the Society of Fellows is a research appointment)
Graduate Advisor of	Andrew Friedman, Cullen Blake (Harvard), Daniel Perley, Adam Miller, Chris Klein, Adam Morgan (Berkeley)
Postdoc sponsor of	Nathaniel R. Butler, Daniel Kocevski, Dov Poznanski, Bethany Cobb, Joey Richards