Dr. Andrew C. Becker  University of Washington

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Professional Preparation

2000	Ph.D. in Astronomy, University of Washington
1996	M.Sc. in Astronomy, University of Washington
1995	B.S. in Physics, Purdue University (highest honors)

Appointments

2012–	Associate Research Professor, University of Washington, Seattle, WA
2006-2012	Assistant Research Professor, University of Washington, Seattle, WA
2002-2006	Postdoctoral Research Associate, University of Washington, Seattle, WA
2002-2003	Postdoctoral Research Associate, LANL, Los Alamos, NM
2000-2003	Postdoctoral Member of Technical Staff, Bell Laboratories, Murray Hill, NJ

Products: Relevant Publications[1]

[1] B. C. Kelly, **A. C. Becker**, P. Uttley, M. Sobolewska, and A. Siemiginowska. Flexible and Scalable Methods for Quantifying Stochastic Variability in the Era of Massive Time-Domain Astronomical Data Sets. *ApJ, Submitted*, 2014.

[2] R. Kessler, **A. C. Becker**, D. Cinabro, J. Vanderplas, J. A. Frieman, J. Marriner, T. M. Davis, B. Dilday, J. Holtzman, S. W. Jha, H. Lampeitl, M. Sako, M. Smith, C. Zheng, R. C. Nichol, B. Bassett, R. Bender, D. L. Depoy, M. Doi, E. Elson, A. V. Filippenko, R. J. Foley, P. M. Garnavich, U. Hopp, Y. Ihara, W. Ketzeback, W. Kollatschny, K. Konishi, J. L. Marshall, R. J. McMillan, G. Miknaitis, T. Morokuma, E. Mörtsell, K. Pan, J. L. Prieto, M. W. Richmond, A. G. Riess, R. Romani, D. P. Schneider, J. Sollerman, N. Takanashi, K. Tokita, K. van der Heyden, J. C. Wheeler, N. Yasuda, and D. York. First-Year Sloan Digital Sky Survey-II Supernova Results: Hubble Diagram and Cosmological Parameters. *ApJS*, 185:32–84, November 2009.

[3] **A. C. Becker** Transient detection and classification. *Astronomische Nachrichten*, 329:280, 2008.

[4] **A. C. Becker**, D. M. Wittman, P. C. Boeshaar, A. Clocchiatti, I. P. Dell'Antonio, D. A. Frail, J. Halpern, V. E. Margoniner, D. Norman, J. A. Tyson, and R. A. Schommer. The Deep Lens Survey Transient Search. I. Short Timescale and Astrometric Variability. *ApJ*, 611:418–433, August 2004.

[1] Aggregate citations to previous publications are in the top 1% in the field of Space Science, Thompson Reuters; http://sciencewatch.com/inter/aut/2010/10-may/10mayBeck/

[5] C. Alcock, R. A. Allsman, D. R. Alves, T. S. Axelrod, **A. C. Becker**, D. P. Bennett, K. H. Cook, N. Dalal, A. J. Drake, K. C. Freeman, M. Geha, K. Griest, M. J. Lehner, S. L. Marshall, D. Minniti, C. A. Nelson, B. A. Peterson, P. Popowski, M. R. Pratt, P. J. Quinn, C. W. Stubbs, W. Sutherland, A. B. Tomaney, T. Vandehei, and D. Welch. The MACHO Project: Microlensing Results from 5.7 Years of Large Magellanic Cloud Observations. *ApJ*, 542:281–307, October 2000.

Synergistic Activities

[1] Committees and Panels: Chair and member of NSF and NASA review panels. On the Time Allocation Committee for the Apache Point Observatory 3.5m telescope. Served on UW Faculty Senate. Peer Review activities include: *ApJ*, *AJ*, *PASP*, *Israel Science Foundation*.

[2] Outreach: Mentor for the Pre-Major in Astronomy Program (Pre-MAP) diversity initiative at the University of Washington. Lecturer for the Pacific Science Center Discovery Corps program. Leader of NSF/LSST Faculty and Student Teams program at UW.

[3] Community Support: Have developed and made publicly available software for time–domain analysis of large datasets. This includes image subtraction code used by many past and present imaging surveys. Git repositories include:
https://github.com/acbecker
https://dev.lsstcorp.org/cgit/LSST/DMS

[4] Collaboration: Member of many time–domain surveys, including: MACHO; Global Microlensing Alert Network (lead); Microlensing Planet Search; Deep Lens Survey Transient Search (lead); ESSENCE; SuperMACHO; SDSS-II Supernova Survey; LSST, 8 years of research and development. PI/Co-I of multiple NSF/NASA grants focused on time-domain science and data mining.

Collaborators and Co–Editors

Eric Agol (U. Washington), Scott Anderson (UW), Tim Axelrod (LSST), Rory Barnes (UW), John Bochanski (Haverford), Andrew Connolly (U. Washington), Roc Cutri (IPAC), Chris Genovese (Carnegie Mellon), Suzanne Hawley (U. Washington), Željko Ivezić (U. Washington), Leslie Hebb (Vanderbilt), R. Lynne Jones (U. Washington), Mario Jurić (LSST), Rick Kessler (U. Chicago), Robert Lupton. (Princeton), Chelsea MacLeod (USNA), Knut Olsen (NOAO), Hakeem Oluseyi (FIT), Andrew Puckett (U. Alaska), Armin Rest (Harvard), Branimir Sesar (Caltech), Richard Shaw (NOAO), Michael Solontoi (Adler), Guy Stringfellow (U. Colorado), Andrew West (Boston U), Benjamin Williams (U. Washington).

Graduate and Postdoctoral Advisors and Advisees

[1] Graduate and Postdoctoral Advisors: Christopher Stubbs (Harvard), J. Anthony Tyson (UC Davis)

[2] Postdoctoral Advisees: None

[3] Graduate Student Advisees: Ricardo Covarrubius (NCSA), Branimir Sesar (Caltech), Eric Hilton, Praveen Kundurthy (Microsoft), Sarah Schmidt (OSU), Jacob Vanderplas (UW), James Davenport (UW)