

# JASON D. EASTMAN

jason.eastman@cfa.harvard.edu

<http://www.cfa.harvard.edu/~jeastman>

617-840-3045

## EDUCATIONAL BACKGROUND

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- 2011 The Ohio State University, Ph.D. in Astronomy  
Thesis: DEMONEX: The DEDicated MONitor of EXotransits  
Advisor: B. Scott Gaudi
- 2007 The Ohio State University, M.S. in Astronomy
- 2005 Boston University, B.A. in Astronomy and Physics, Cum Laude

## APPOINTMENTS

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- 2014-present Research Associate (Harvard-Smithsonian Center for Astrophysics)
- 2011-2014 Postdoctoral Fellow (Las Cumbres Observatory Global Telescope)
- 2010-2011 Presidential Fellow (The Ohio State University)  
The Graduate School's most prestigious award
- 2008-2010 Teaching Assistant and Research Assistant (The Ohio State University)
- 2005, 2007 Price Instrumentation Fellow (The Ohio State University)
- 2006 Research Assistant (The Ohio State University)

## GRANTS & HONORS

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- 2014 Coauthor of successful NSF ATI grant AST-1407666 – \$61,691  
“Development of environment-controlled enclosures for NRES”
- 2012 Coauthor of successful NSF MRI grant AST-1229720 – \$2,459,389  
“Development of the Global Network of Robotic Echelle Spectrographs - NRES”
- 2010 Allan Markowitz Award in Observational Astronomy (The Ohio State University)
- 2005 Institute for Astrophysical Research Prize Recipient (Boston University)

## INSTRUMENTATION EXPERIENCE

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| 2014         | Sinistro automated CCD optimization         | 15 4K x 4K detectors              |
| 2013-Present | 2m Faulkes Telescopes re-commissioning      | 2 robotic 2-meter telescopes      |
| 2013-Present | FLOYDS commissioning, acquisition, software | 2 robotic low-res spectrographs   |
| 2012         | BOS re-commissioning                        | 0.8m robotic telescope            |
| 2011-Present | NRES grant, design, commissioning, software | 6 Robotic PRV spectrographs       |
| 2011-Present | LCOGT commissioning, metrics, operations    | Network of 9 robotic 1 meters     |
| 2008-Present | DEMONEX design, assembly, automation        | 0.5 meter robotic telescope       |
| 2005-2011    | MODS lab characterization                   | LBT multi-object spectrograph     |
| 2007         | 4K commissioning, reduction pipeline        | Optical imager                    |
| 2007         | SMARTS consortium maintenance               | Telescope, CCD                    |
| 2006,2007    | LBC/LBT commissioning, aluminization        | Telescope, imager, active optics  |
| 2002-2005    | PRISM development, testing, commissioning   | Multi-object spectrograph, imager |

## REFEREED PUBLICATIONS (SIGNIFICANT CONTRIBUTION) \_\_\_\_\_

1612 total citations on 109 abstracts with an H-index of 21 as of Oct 13, 2014

1. “An Integer Linear Programming Solution to the Telescope Network Scheduling Problem” Lampoudi, S., Saunders, E., **Eastman, J. D.**, 2015, ICORES, Accepted
2. “Barycentric Corrections at 1 cm/s for precise Doppler velocities” Wright, J. T., & **Eastman, J. D.**, 2014, PASP, Accepted (arXiv:1409.4774)
3. “Warm Ice Giant GJ 3470b. II. Revised Planetary and Stellar Parameters from Optical to Near-Infrared Transit Photometry” Biddle, L. I., et al., (incl. **Eastman, J.D.**), 2014, MNRAS, 443, 1810
4. “Spitzer and z’ Secondary Eclipse Observations of the Highly Irradiated Transiting Brown Dwarf KELT-1b” Beatty, et al., (incl. **Eastman, J.D.**), 2014, ApJ, 783, 112
5. “KELT-6b: A Transiting Mildly-Inflated Saturn with a Metal-Poor Host” Collins, Karen A., **Eastman, J.D.**, et al., 2014, AJ, 147, 39
6. “Las Cumbres Observatory Global Telescope Network” Brown, et al., (incl. **Eastman, J.D.**), 2013, PASP, 125, 1031
7. “KELT-3b: A Hot Jupiter Orbiting a V=9.8 Late F Star” Pepper et al. (incl. **Eastman, J.D.**) 2013, ApJ, 773, 64
8. “MOST Detects Transits of HD 97658b, a Warm, Likely Volatile-rich Super-Earth” Dragomir, D; Matthews, J. M., **Eastman, J.D.**, et al., 2013, ApJ, 772, 2
9. “Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. V. A Low Eccentricity Brown Dwarf from the Driest Part of the Desert, MARVELS-6b” De Lee et al., (incl. **Eastman, J.D.**) 2013, AJ, 145, 155
10. “A Cautionary Tale: MARVELS Brown Dwarf Candidate Reveals Itself to be a Very Long Period, Highly Eccentric Spectroscopic Stellar Binary” Mack et al., (incl. **Eastman, J.D.**) 2013, AJ, 145, 139
11. “KELT-2Ab: A Hot Jupiter Transiting the Bright ( $V = 8.77$ ) Primary Star of a Binary System” Beatty et al. (incl. **Eastman, J.D.**) 2012, ApJL, 756, 2
12. **“EXOFAST: A fast exoplanetary fitting suite in IDL”**  
**Eastman, J. D., Gaudi. B. S., & Agol, E., 2012, PASP, 125, 83**
13. “KELT-1b: A Strongly Irradiated, Highly Inflated, Short Period, 27 Jupiter-mass Companion Transiting a mid-F Star” Siverd et al. (incl. **Eastman, J.D.**), 2012, ApJ, 761, 123
14. “Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. I. A Low-mass Ratio Stellar Companion to TYC 4110-01037-1 in a 79 Day Orbit” Wisniewski et al. (incl. **Eastman, J.D.**), 2012, AJ, 143, 5
15. “MARVELS-1b: A Short-Period, Brown Dwarf Desert Candidate from the SDSS-III MARVELS Planet Search” Lee, B. L., et al. (incl. **Eastman, J.D.**), 2011, ApJ, 728, 32
16. **“Achieving better than 1 minute accuracy in the Heliocentric and Barycentric Julian Dates”** **Eastman, J. D., Siverd, R. J., & Gaudi. B. S., 2010, PASP, 122, 935**
17. “Discovery of a Low-Mass Companion to a Metal-Rich F Star with the MARVELS Pilot Project” Fleming, S. W., et al. (incl. **Eastman, J. D.**), 2010, ApJ, 718, 1186

18. “Analytic Approximations for Transit Light-Curve Observables, Uncertainties, and Covariances” Carter, J. A., Yee, J. C., **Eastman, J. D.**, Gaudi, B. S., Winn, J. N., 2008, ApJ, 689, 499
19. “**First Measurement of a Rapid Increase in the AGN Fraction in High-Redshift Clusters of Galaxies**” **Eastman, J. D.**, Martini, P., Sivakoff, G., Kelson, D. D., Mulchaey, J. S., & Tran, K., 2007, ApJL, 664, 9
20. “Photometry of neglected open clusters in the first and fourth Galactic quadrants” Carraro, G., Janes, K. A., & **Eastman, J. D.** 2005, MNRAS, 364, 179

## OTHER REFEREED PUBLICATIONS

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1. “Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. IV. A Candidate Brown Dwarf or Low-mass Stellar Companion to HIP 67526” Jiang, et al., (incl. **Eastman, J.D.**), 2013, AJ, 146, 65
2. “MARVELS-1: A Face-on Double-lined Binary Star Masquerading as a Resonant Planetary System and Consideration of Rare False Positives in Radial Velocity Planet Searches” Wright et al., (incl. **Eastman, J.D.**), 2013, ApJ, 770, 119
3. “Very-low-mass Stellar and Substellar Companions to Solar-like Stars from Marvels. III. A Short-period Brown Dwarf Candidate around an Active G0IV Subgiant” Ma, et al., (incl. **Eastman, J.D.**), 2013, AJ, 145, 20
4. “Optical Monitoring of the Broad-line Radio Galaxy 3C 390.3” Dietrich, et al., (incl. **Eastman, J.D.**), 2012, ApJ, 757, 53
5. “Transit Analysis Package: An IDL Graphical User Interface for Exoplanet Transit Photometry” Gazak et al., (incl. **Eastman, J.D.**), 2012, Adv. Astron, 697967
6. “MOA-2009-BLG-387Lb: a massive planet orbiting an M dwarf” Batista, V., et al., (incl. **Eastman, J.D.**), 2011, A&A, 529, 102
7. “Pre-discovery and Follow-up Observations of the Nearby SN 2009nr: Implications for Prompt Type Ia SNe” Khan, R., et al., (incl. **Eastman, J. D.**), 2010, ApJ, 726, 106
8. “Reverberation Mapping Measurements of Black Hole Masses in Six Local Seyfert Galaxies” Denney, K. D., et al. (incl. **Eastman, J.D.**), 2010, ApJ, 721, 715
9. “Frequency of Solar-like Systems and of Ice and Gas Giants Beyond the Snow Line from High-magnification Microlensing Events in 2005-2008” Gould, A., et al. (incl. **Eastman, J.D.**), 2010, ApJ, 720, 1073
10. “Variability and stability in blazar jets on time-scales of years: optical polarization monitoring of OJ 287 in 2005-2009” Villforth, C., et al. (incl. **Eastman, J.D.**), 2010, MNRAS, 402, 2087
11. “Diverse Kinematic Signatures from Reverberation Mapping of the Broad-Line Region in AGNs” Denney, K. D., et al. (incl. **Eastman, J.D.**)”, 2009, ApJL, 704, L80
12. “A Revised Broad-line Region Radius and Black Hole Mass for the Narrow-line Seyfert 1 NGC 4051” Denney, K. D., et al. (incl. **Eastman, J.D.**), 2009, ApJ, 702, 1353
13. “Extreme Magnification Microlensing Event OGLE-2008-BLG-279: Strong Limits on Planetary Companions to the Lens Star” Yee, J. C., et al. (incl. **Eastman, J.D.**), 2009, ApJ, 703, 2082

14. "Tidally Induced Outbursts in OJ 287 during 2005-2008" Valtonen, M. J., et al. (incl. **Eastman, J.D.**), 2009, ApJ, 698, 781
15. "The Mass of the Black Hole in the Quasar PG 2130+099" Grier, C. J., et al. (incl. **Eastman, J. D.**), 2008, ApJ, 688, 837
16. "First-Year Spectroscopy for the Sloan Digital Sky Survey-II Supernova Survey" Zheng, C., et al. (incl. **Eastman, J.D.**), 2008, AJ, 135, 1766
17. "The Sloan Digital Sky Survey-II Supernova Survey: Technical Summary" Frieman, J. A., et al. (incl. **Eastman, J.D.**), 2008, AJ, 135, 338
18. "A Study of the Type Ia/IIIn Supernova 2005gj from X-ray to the Infrared: Paper I" Prieto, J. L., et al. (incl. **Eastman, J.D.**), 2007, AJ, Submitted (arXiv:0706.4088)
19. "The Peculiar SN 2005hk: Do Some Type Ia Supernovae Explode as Deflagration?" Phillips, M. M., et al. (incl. **Eastman, J.D.**), 2007, PASP, 119, 360
20. "Exploring Broadband GRB Behavior during  $\gamma$ -Ray Emission" Yost, S.A., et al. (incl. **Eastman, J.D.**), 2007, ApJ, 2007, 657, 925

## NON-REFEREED PUBLICATIONS

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1. "NRES: the Network of Robotic Echelle Spectrographs"  
**Eastman, J.D.; Brown, T.M.; Hygelund, J.; van Eyken, J.; Tufts, J.R.; Barnes, S., 2014, Proc of the SPIE, 9147, 41**
2. "Kepler planet candidates consistent with core accretion" Gould, A., & **Eastman, J. D.**, 2011, arXiv:1102.1009
3. "DEMONEX: the DEDicated MONitor of EXotransits"  
**Eastman, J. D., Gaudi, B. S., Siverd, R. J., Trueblood, M., Trueblood, P., 2010, Proc of the SPIE, 7733, 110**
4. "High-Accuracy Measurements of Variations in Transit Timing: A New Method for Detecting Terrestrial-Class Extrasolar Planets" Haghighipour, N., Agol, E., **Eastman, J. D.**, Ford, E. B., Gaudi, B. S., Holman, M. J., Steffen, J., & Veras, D. 2009, astro2010: The Astronomy and Astrophysics Decadal Survey, 2010, 109
5. "DEMONEX: The DEDicated MONitor of EXotransits"  
**Eastman, J. D.; Gaudi, B. S.; DePoy, D. L., 2009, IAU Symposium, 253, 408**
6. "Multi-slit mask fabrication on spherical electroformed shell substrates" O'Brien, Thomas P.; **Eastman, Jason D.**, 2006, Proc of the SPIE, 6273, 89
7. "An image motion compensation system for the multi-object double spectrograph" Marshall, J. L. et al., (incl. **Eastman, J.D.**), 2006, Proc of the SPIE, 6269, 51
8. "Origin of the Break and Mass-Dependence in the Wide-Binary Projected-Separation Distribution" Gould, Andrew; **Eastman, Jason**, 2006, arXiv:0610799

1. “FLOYDS Spectroscopic Classification of CSS140222:112037+302809 as a Type II<sub>n</sub> Supernova”, Valenti, S.; **Eastman, J.**; et al., 2014, ATEL, 6057
2. “Spectroscopic classification for LSQ14aoh (SN Ia), LSQ14aqd (II), and CSS140330:114223-230653 (II) with FLOYDS at Faulkes Telescope South”, Valenti, S.; **Eastman, J.**; et al., 2014, ATEL, 6037
3. “**NRES: The Network of Robotic Echelle Spectrographs**” **Eastman, Jason; Brown, T. M.; Hygelund, J.; Van Eyken, J. C., 2014, AAS, 223**
4. “Warm Ice Giant GJ 3470b: Revised Planetary and Stellar Parameters from Optical to Near-infrared Transit Photometry” Biddle, et al., (incl. **Eastman, J.D.**), 2014, AAS, 223
5. “Transit Photometry with the LCOGT Network” Dragomir, D., **Eastman, J.D.**, et al., 2013, PrPL, 45
6. “KELT-6b: A Transiting Mildly-Inflated Saturn with a Metal-Poor Host” Collins et al., (incl. **Eastman, J.D.**), 2013, AAS, 222
7. “LCOGT’s New Telescopes and Instruments” Brown et al., (incl. **Eastman, J.D.**), 2013, AAS, 221
8. “KELT-3b: A Hot Jupiter Around a Bright V=9.8 Late-F Star” Pepper et al., (incl. **Eastman, J.D.**), 2013, AAS, 221
9. “The KELT-North Transit Survey’s First Planetary Detections” Beatty et al., (incl. **Eastman, J.D.**), 2012, AAS, 220
10. “A Cautionary Tale: MARVELS Brown Dwarf Candidate Reveals Itself as a Likely Eccentric Binary” Mack et al., (incl. **Eastman, J.D.**), 2012, AAS, 219
11. “Spectroscopy at LCOGT” Brown, et al., (incl. **Eastman, J.D.**), 2012, AAS, 219
12. “The KELT Survey for Transiting Planets around Bright Stars” Pepper et al. (incl. **Eastman, J.D.**), 2012, AAS, 219
13. “**DEMONEX: the DEDicated MONitor of EXotransits**” **Eastman, J. D., 2011, Bulletin of the American Astronomical Society, 43**
14. “TYC 1240-945-1b: First Brown Dwarf Candidate from the SDSS-III-MARVELS Planet Search” Lee et al. (incl. **Eastman, J.D.**), 2010, Bulletin of the American Astronomical Society, 41, 519
15. “Binary Science from the MARVELS Pilot Project: Detection of a Candidate Substellar Companion and Identification of Eclipsing Binaries with Archival SuperWASP Data” Fleming et al. (incl. **Eastman, J.D.**), 2010, Bulletin of the American Astronomical Society, 41, 518

16. "DEMONEX: the DEDicated MONitor of EXotransits" Gaudi, B. Scott, **Eastman, J. D.**, 2009, American Astronomical Society Meeting Abstracts, 214, #201.02
17. "Analytic approximations for transit light curve observables and uncertainties" Carter, Joshua A., Yee, Jennifer C., **Eastman, Jason**, Gaudi, B. Scott, Winn, Joshua N., 2009, IAU Symposium, 253, 392
18. "Supernova 2008S in NGC 6946" Yee, J. C.; **Eastman, J. D.**; Prieto, J. L. 2008, Central Bureau Electronic Telegrams, 1340, 1
19. "Supernovae 2007rg and 2007sb-2007sn" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1167, 1
20. "Supernovae 2007qz and 2007rc-2007rs" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1146, 1
21. "Supernovae 2007qf-2007ra" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1139, 1
22. "Supernova 2007qd" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1137, 1
23. "Supernovae 2007pn-2007qb" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1135, 1
24. "Supernovae 2007oq-2007pj" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1128, 1
25. "Supernovae 2007oe-2007om" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1117, 1
26. "Supernovae 2007lx and 2007nr-2007oa" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1109, 1
27. "Supernovae 2007md and 2007mr-2007nl" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1104, 1
28. "Supernovae 2007lf-2007mp" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1102, 1
29. "Supernovae 2007ju and 2007kl-2007ld" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1098, 1
30. "Supernovae 2007jy-2007kb" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1081, 1
31. "Supernovae 2007ji-2007jx" Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1079, 1

32. “Supernovae 2007ix-2007jh” Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1076, 1
33. “Supernovae 2007ih-2007ik” Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1061, 1
34. “Supernovae 2007hw-2007ie” Bassett, B., et al. (incl. **Eastman, J.D.**) 2007, Central Bureau Electronic Telegrams, 1057, 1
35. “Supernova 2006rz” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 770, 1
36. “Supernovae 2006ob-2006op” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 745, 1
37. “Supernovae 2006mz-2006ne” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 735, 1
38. “Supernovae 2006lj-2006ls” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 713, 1
39. “Supernovae 2006kg-2006lc” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 688, 1
40. “Supernova 2006jc in UGC 4904” Crotts, A., **Eastman, J.**, Depoy, D., Prieto, J. L., & Garnavich, P. 2006, Central Bureau Electronic Telegrams, 672, 1
41. “Supernovae 2006iw and 2006ix-2006ja” Bassett, B., et al. (incl. **Eastman, J.D.**) 2006, Central Bureau Electronic Telegrams, 667, 1
42. “Supernova 2005gj” Prieto, J., Garnavich, P., Depoy, D., Marshall, J., **Eastman, J.**, & Frank, S. 2005, IAU Circular, 8633, 1
43. “**Supernovae 2005kd, 2005ke, 2005kf**”  
**Eastman, J., & Prieto, J. 2005, IAU Circular, 8630, 2**
44. “Supernova 2005gj” Prieto, J., Garnavich, P., Depoy, D., Marshall, J., **Eastman, J.**, & Frank, S. 2005, Central Bureau Electronic Telegrams, 302, 1
45. “**Supernova 2005kd in Pgc 14370**”  
**Eastman, J., et al. 2005, Central Bureau Electronic Telegrams, 290, 1**
46. “Supernova 2005kc in NGC 7311” Peeples, M., et al. (incl. **Eastman, J.D.**) 2005, Central Bureau Electronic Telegrams, 286, 1
47. “**GRB 051021: MDM upper limit.**”  
**Eastman, J., Depoy, D. L., Crotts, A. P., & Beirne, D. J. 2005, GRB Coordinates Network, 4138, 1**

48. "First Results from the Perkins Re-Imaging System (PRISM)" Janes, K. A., Clemens, D. P., Hayes-Gehrke, M. N., **Eastman, J. D.**, Sarcia, D. S., Bosh, A. S., 2004, AAS, 204, 1001