

Robert C. Morehead | Curriculum Vitæ

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Education

The Pennsylvania State University

Doctoral Candidate, Astronomy & Astrophysics

Advisor: Eric B. Ford

University Park, PA

2013–2014

The University of Florida

Master of Science, Astronomy

Advisor: Eric B. Ford

Gainesville, FL

2009–2013

Columbia University

Bachelor of Science, Astrophysics

Advisor: Caleb Scharf

New York, NY

2006–2009

South Puget Sound Community College

Olympia, WA

2004–2006

Awards and Fellowships

2011–2014: National Science Foundation Graduate Research Fellowship

2005: Phi Theta Kappa

Publications

Publications with Significant Contribution.....

- **Transit timing observations from Kepler - VII. Confirmation of 27 planets in 13 multiplanet systems via transit timing variations and orbital stability**
Steffen, J. H., Fabrycky, D. C., Agol, E., Ford, E. B., **Morehead, R. C.**, Cochran, W. D., Lissauer, J. J., Adams, E. R., Borucki, W. J., Bryson, S., et al. Monthly Notices of the Royal Astronomical Society, Volume 428, Issue 2, p.1077-1087
- **Constraining the false positive rate for Kepler planet candidates with multicolour photometry from the GTC**
Colón, K. D., Ford, E. B., **Morehead, R. C.** Monthly Notices of the Royal Astronomical Society, Volume 426, Issue 1, pp. 342-353.
- **Constraining the False Positive Rate for Kepler Planet Candidates with Multi-Color Photometry from the GTC**
Colón, K. D., Ford, E. B., **Morehead, R. C.** eprint arXiv:1207.2481
- **Transit Timing Observations from Kepler. II. Confirmation of Two Multiplanet Systems via a Non-parametric Correlation Analysis**
Ford, E. B., Fabrycky, D. C., Steffen, J. H., Carter, J. A., Fressin, F., Holman, M. J., Lissauer, J. J., Moorhead, A. V., **Morehead, R. C.**, Ragozzine, D., et al. The Astrophysical Journal, Volume 750, Issue 2, article id. 113, 18 pp. (2012).
- **Architecture of Kepler's Multi-transiting Systems: II. New investigations with twice as many candidates**
Fabrycky, D. C., Lissauer, J. J., Ragozzine, D., Rowe, J. F., Steffen, J. H., Agol, E., Barclay, T., Batalha, N., Borucki, W., Ciardi, D. R., et al. eprint arXiv:1202.6328
- **Kepler's candidate multiple transiting planets (Lissauer+, 2011)**
Lissauer, J. J., Ragozzine, D., Fabrycky, D. C., Steffen, J. H., Ford, E. B., Jenkins, J. M., Shporer, A., Holman, M. J., Rowe, J. F., Quintana, E. V., et al. VizieR On-line Data Catalog: J/ApJS/197/8. Originally published in: 2011ApJS..197....8L
- **Architecture and Dynamics of Kepler's Candidate Multiple Transiting Planet Systems**
Lissauer, J. J., Ragozzine, D., Fabrycky, D. C., Steffen, J. H., Ford, E. B., Jenkins, J. M., Shporer, A., Holman, M. J., Rowe, J. F., Quintana, E. V., et al. The Astrophysical Journal Supplement, Volume 197, Issue 1, article id. 8, 26 pp. (2011).
- **The Distribution of Transit Durations for Kepler Planet Candidates and Implications for Their Orbital Eccentricities**
Moorhead, A. V., Ford, E. B., **Morehead, R. C.**, Rowe, J., Borucki, W. J., Batalha, N. M., Bryson, S. T., Caldwell, D. A., Fabrycky, D. C., Gautier, T. N., III, et al. The Astrophysical Journal Supplement, Volume 197, Issue 1, article id. 1, 15 pp. (2011).

- **A closely packed system of low-mass, low-density planets transiting Kepler-11**
Lissauer, J. J., Fabrycky, D. C., Ford, E. B., Borucki, W. J., Fressin, F., Marcy, G. W., Orosz, J. A., Rowe, J. F., Torres, G., Welsh, W. F., et al. *Nature*, Volume 470, Issue 7332, pp. 53-58 (2011).
- **The Architectures of Planetary Systems from Transit Observations**
Ford, E. B., Fabrycky, D. C., Holman, M. J., Lissauer, J. J., Moorhead, A. V., **Morehead, R. C.**, Ragozzine, D., Steffen, J. H., Koch, D., Kepler Science Team American Astronomical Society, AAS Meeting #217, #103.05; *Bulletin of the American Astronomical Society*, Vol. 43, 2011
- **Five Kepler Target Stars That Show Multiple Transiting Exoplanet Candidates**
Steffen, J. H., Batalha, N. M., Borucki, W. J., Buchhave, L. A., Caldwell, D. A., Cochran, W. D., Endl, M., Fabrycky, D. C., Fressin, F., Ford, E. B., et al. *The Astrophysical Journal*, Volume 725, Issue 1, pp. 1226-1241 (2010).
- **Kepler-9: A System of Multiple Planets Transiting a Sun-Like Star, Confirmed by Timing Variations**
Holman, M. J., Fabrycky, D. C., Ragozzine, D., Ford, E. B., Steffen, J. H., Welsh, W. F., Lissauer, J. J., Latham, D. W., Marcy, G. W., Walkowicz, L. M., et al. *Science*, Volume 330, Issue 6000, pp. 51- (2010).
- **Discovery of a Low-mass Companion to a Metal-rich F Star with the MARVELS Pilot Project**
Fleming, S. W., Ge, J., Mahadevan, S., Lee, B., Eastman, J. D., Siverd, R. J., Gaudi, B. S., Niedzielski, A., Sivarani, T., Stassun, K. G., et al. *The Astrophysical Journal*, Volume 718, Issue 2, pp. 1186-1199 (2010).

Other Peer-Reviewed Publications.....

- **Planetary Candidates Observed by Kepler IV: Planet Sample from Q1-Q8 (22 Months)**
Burke, C. J., Bryson, S. T., Mullally, F., Rowe, J. F., Christiansen, J. L., Thompson, S. E., Coughlin, J. L., Haas, M. R., Batalha, N. M., Caldwell, D. A., et al. The Astrophysical Journal Supplement, Volume 210, Issue 2, article id. 19, 12 pp. (2014).
- **Planet Occurrence within 0.25 AU of Solar-type Stars from Kepler**
Howard, A. W., Marcy, G. W., Bryson, S. T., Jenkins, J. M., Rowe, J. F., Batalha, N. M., Borucki, W. J., Koch, D. G., Dunham, E. W., Gautier, T. N., III, et al. The Astrophysical Journal Supplement, Volume 201, Issue 2, article id. 15, 20 pp. (2012).
- **Almost All of Kepler's Multiple-planet Candidates Are Planets**
Lissauer, J. J., Marcy, G. W., Rowe, J. F., Bryson, S. T., Adams, E., Buchhave, L. A., Ciardi, D. R., Cochran, W. D., Fabrycky, D. C., Ford, E. B., et al. The Astrophysical Journal, Volume 750, Issue 2, article id. 112, 15 pp. (2012).
- **Kepler's First Rocky Planet: Kepler-10b**
Batalha, N. M., Borucki, W. J., Bryson, S. T., Buchhave, L. A., Caldwell, D. A., Christensen-Dalsgaard, J., Ciardi, D., Dunham, E. W., Fressin, F., Gautier, T. N., III, et al. The Astrophysical Journal, Volume 729, Issue 1, article id. 27, 21 pp. (2011).
- **Ground-based Multisite Observations of Two Transits of HD 80606b**
Shporer, A., Winn, J. N., Dreizler, S., Colón, K. D., Wood-Vasey, W. M., Choi, P. I., Morley, C., Moutou, C., Welsh, W. F., Pollaco, D., et al. The Astrophysical Journal, Volume 722, Issue 1, pp. 880-887 (2010).

Other Publications and Conference Abstracts.....

- **A Test of Stellar Cohabitation in Multiple Transiting Planet Systems**
Morehead, R. C., Ford, E. B. American Astronomical Society, AAS Meeting #221, #343.04
- **Enhancing Multiple-Transiting Planet System Validation with Transit Duration Ratios**
Morehead, R. C., Ford, E. B., Prša, A., Ragozzine, D. American Astronomical Society, ESS meeting #2, #28.01
- **Validation of Candidate Multiple-Transiting Planet Systems and Assessing Possible False Positives based on Photometric Observables**
Morehead, R., Ford, E. B., Kepler Science Team American Astronomical Society, AAS Meeting #217, #140.09; Bulletin of the American Astronomical Society, Vol. 43, 2011
- **The Distribution of Orbital Eccentricities for Kepler Planet Candidates**
Moorhead, A., Ford, E. B., Morehead, R., Kepler Science Team American Astronomical Society, AAS Meeting #217, #103.06; Bulletin of the American Astronomical Society, Vol. 43, 2011
- **Status of a Program Monitoring Optical Lunar Surface Transients**
Crotts, A. P. S., Berger, A., Cecil, G., Cseresnjcs, P., Ebel, D., Hickson, P., Joner, M., Pfrommer, T., Marka, S., Morehead, R., et al. 40th Lunar and Planetary Science Conference, (Lunar and Planetary Science XL), held March 23-27, 2009 in The Woodlands, Texas, id.2373