Kyle Conroy

Department of Astrophysics & Planetary Sciences
Villanova University
800 E Lancaster Ave, Villanova PA 19085
kyle.conroy@villanova.edu
Web Version

Education

May 2018	PhD in Physics, **Vanderbilt University** Nasvhille, TN | Advisors: Keivan Stassun & Andrej Prša Dissertation: *Astrophysics of Stellar Multiple Systems*
May 2011	BS in Astronomy and Astrophysics, **Villanova University** Villanova, PA | Advisor: Andrej Prša | Minor: Physics

Teaching Positions

Jan 2014, June 2015	Internship Sponsor | Vanderbilt University Hosted high-school students for 6-week internships
Spring 2015	Contributing Lecturer | Vanderbilt University Planned and cotaught a freshman "Commons Seminar" on exoplanets
Aug 2013 - June 2014	Graduate Teaching Assistant | Vanderbilt University Intro Nighttime Astronomy Lab - helped create labs and taught the lab
Spring 2012, 2018	Teaching Assistant | Villanova University Graded and helped teach the senior-level capstone course 'Modeling Analysis'
Fall 2008 - 2010	Undergraduate Teaching Assistant | Villanova University Co-taught and graded labs for AST 1073 Stellar Lab

Research Positions

Current Nov 2016	Research Technician | Villanova University Dr Andrej Prša
June 2012 - May 2018	Graduate Research Assistant | Vanderbilt University Dr Keivan Stassun
Aug 2011 - June 2012	Research Consultant | Villanova University Dr Andrej Prša
Summer 2011	Research Associate | Pennsylvania State University Dr Richard Wade
Summer 2010	SARA NSF REU Intern | Butler University Dr Brian Murphy
Feb 2008 - June 2011	Undergraduate Research Assistant | Villanova University Dr Edward Guinan and Dr Andrej Prša

Observing Experience

May 2015	Arranged world-wide photometric follow-up campaign for triple eclipse event of KIC 2835289
Summer 2012	Mayall 4-m at KPNO
Summer 2010	SARA 0.9-m at KPNO and remotely at CTIO

Selected Publications

Conroy, K. E., Prša, A., Horvat, M., Stassun K.G., 2016, **ApJ**, 854, 163.
The Effects of Barycentric and Asymmetric Transverse Velocities on Eclipse and Transit Times

Prša, A., **Conroy, K. E.**, Horvat, M., et al. 2016, **ApJS**, 227, 29.
Physics of Eclipsing Binaries. II. Toward the Increased Model Fidelity

Abdul-Masih, M., Prša, A., **Conroy, K.**, et al. 2016, **AJ**, 151, 101.
Kepler Eclipsing Binary Stars. VIII. Identification of False Positive Eclipsing Binaries and Re-extraction of New Light Curves

Kirk, B., **Conroy, K.**, Prša, A., et al. 2016, **AJ**, 151, 68.
Kepler Eclipsing Binary Stars. VII. The Catalog of Eclipsing Binaries Found in the Entire Kepler Data-Set

Conroy, K. E., Prša, A., Stassun, K. G., et al. 2014, **PASP**, 126, 914.
Kepler Eclipsing Binary Stars. V. Identification of 31 Candidate Eclipsing Binaries in the K2 Engineering Dataset

Conroy, K. E., Prša, A., Stassun, K. G., et al. 2014, **AJ**, 147, 45.
Kepler Eclipsing Binary Stars. IV. Precise Eclipse Times for Close Binaries and Identification of Candidate Three-body Systems

Slawson, R. W., Prša, A., Welsh, W. F., ..., **Conroy, K. E.** 2011, **AJ**, 142, 160.
Kepler Eclipsing Binary Stars. II. 2165 Eclipsing Binaries in the Second Data Release

Prša, A., Batalha, N., Slawson, R. W., .., **Conroy, K. E.** 2011, **AJ**, 141, 83.
Kepler Eclipsing Binary Stars. I. Catalog and Principal Characterization of 1879 Eclipsing Binaries in the First Data Release

Contributed Publications

LaCourse, D. M., Jek, K. J., Jacobs, T. L., ..., **Conroy, K. E.** 2015, arXiv:1503.01829
Kepler Eclipsing Binary Stars. VI. Identification of Eclipsing Binaries in the K2 Campaign 0 Data-set

Hambleton, K. M., Kurtz, D. W., Prša, A., ..., **Conroy, K. E.** 2013, MNRAS, 434, 925.
KIC 4544587: an eccentric, short-period binary system with δ Sct pulsations and tidally excited modes

Oral Presentations

Conroy, K. E. 2016, Hotwiring the Transient Universe V., Villanova University
Model-Centric All-Sky EB Catalog: collaborative open-science and optimizing follow-up efforts

Conroy, K. E. 2016, Binary Stars in Cambridge, University of Cambridge
Modeling Triple Star Systems in PHOEBE 2.0

Conroy, K. E., Prša, A., & Stassun, K. 2015, AAS Meeting Abstracts, 225, #415.06.
A Triple Eclipsing System as a Test Case for Close Binary Formation Through Kozai Cycles

Conroy, K. E., Prša, A., Stassun, K. 2015, ASP Conference Series, 496, 99C
A Triple Eclipsing System as a Test Case for Close Binary Formation Through Kozai Cycles

Conroy, K., Degroote, P., Hambleton, K., et al. 2013, EAS Publications Series, 64, 295.
PHOEBE 2.0 - Triple and Multiple Systems

Conroy, K. E., Prša, A., Orosz, J., et al. 2012, AAS Meeting Abstracts 220, #406.03.
Eclipse Timing Variations of Short-Period Binaries in the Kepler Field

Poster Presentations

Conroy, K. E., Prša, A., Horvat, M., & Stassun, K. 2016, AAS Meeting Abstracts, 229, #344.22.
Robust Modeling of Stellar Triples in PHOEBE

Conroy, K. E., Prša, A., & Stassun, K. 2014, AAS Meeting Abstracts, 223, #155.20.
A Triple Eclipsing System as a Test Case for Close Binary Formation Through Kozai Cycles

Conroy, K. E., Darragh, A. N., Liu, Z. J., & Murphy, B. W. 2011, Bulletin of the AAS, 43, #152.18.
Variable Stars in the Globular Cluster M14

Conroy, K., Engle, S., Ballouz, R., & Prša, A. 2010, Bulletin of the AAS, 42, #419.36.
Surface Activity Analysis of the Eclipsing Binary UV Leonis Based On New Spectrophotometric Data

Invited Talks

March 2018	Stars & Planets Seminar Center for Astrophysics | Harvard University
December 2017	Invited Colloquium Speaker Department of Mathematics and Physics | Ljubljana University, Slovenia
April 2015	Invited to lead workshop on using PHOEBE Space-Inn Workshop | KU Leuven, Belgium

Code Products

PHOEBE	Member of the development team GitHub open-source repository
PHOEBE Website	Author and maintainer of PHOEBE website phoebe-project.org
KeplerEBs Website	Author and maintainer of Kepler Eclipsing Binaries web portal keplerEBs.villanova.edu

Professional Development

Refereed Articles	Astronomical/Astrophysical Journal (3), Astronomy & Astrophysics (3), Monthly Notices of the Royal Astronomical Society (5), Information Bulletin on Variable Stars (1), Publications of the Astronomical Society of Japan (1) Astrophysics & Space Science (1)
Summer 2015	Started departmental AstroHacks | Vanderbilt University weekly meetings to work on collaborative code projects (GitHub repository)