Kyle CONROY

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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

JUNE 2018 - CURRENT	Astronomy Post-Doc Researcher | VILLANOVA UNIVERSITY
NOV 2016 - MAY 2018	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

Horvat, M., **Conroy, K. E.**, Pablo, H., et al. 2018, **ApJS**, 237, 26.
Physics of Eclipsing Binaries. III. Spin-Orbit Misalignment

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., Horvat, M., Hambleton, K., Kochoska, A., Giammarco, J., Prša, A. 2019, AAS Meeting Abstracts 233, #348.27.
Considerations and Design Principles for the 2.1 Release of the PHOEBE Eclipsing Binary Modeling Code

Conroy, K., Prša A., Horvat, M., Stassun K. 2018, AAS Meeting Abstracts, 231, #244.25.
The Effect of Transverse Motion on Eclipse and Transit Times

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

June 2018	Co-Lead Workshop, including giving tutorials and talks PHOEBE Workshop | Villanova 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.com/phoebe-project
PHOEBE Website	Author and maintainer of PHOEBE website phoebe-project.org
`autofig`	Author and maintainer of `autofig` python plotting package github.com/kecnry/autofig
`nparray`	Author and maintainer of `nparray` python package github.com/kecnry/nparray
KeplerEBs Website	Author and maintainer of Kepler Eclipsing Binaries web portal keplerEBs.villanova.edu

Professional Development

Refereed Articles	Astronomical/Astrophysical Journal (4), Astronomy & Astrophysics (3), Monthly Notices of the Royal Astronomical Society (7), Information Bulletin on Variable Stars (1), Publications of the Astronomical Society of Japan (2) MDPI Data (1), Astrophysics & Space Science (1)
Grant Review Panels	NSF AAG (1)
Summer 2015	Started departmental AstroHacks | Vanderbilt University weekly meetings to work on collaborative code projects ([GitHub repository](#))