

Kyle CONROY

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[Web Version](#)

EDUCATION

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| MAY 2018 | PhD in PHYSICS, Vanderbilt University
Nashville, TN ADVISORS: Keivan Stassun & Andrej Prša
DISSERTATION: <i>Astrophysics of Stellar Multiple Systems</i> |
| MAY 2011 | BS in ASTRONOMY AND ASTROPHYSICS, Villanova University
Villanova, PA ADVISOR: Andrej Prša MINOR: Physics |

TEACHING POSITIONS

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| 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

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| 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
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DECEMBER 2017	Invited Colloquium Speaker Department of Mathematics and Physics LJUBLJANA UNIVERSITY, Slovenia
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APRIL 2015	Invited to lead workshop on using PHOEBE Space-Inn Workshop KU LEUVEN, Belgium
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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 (4), Astronomy & Astrophysics (3), Monthly Notices of the Royal Astronomical Society (6), Information Bulletin on Variable Stars (1), Publications of the Astronomical Society of Japan (2) MDPI Data (1), Astrophysics & Space Science (1)
SUMMER 2015	Started departmental ASTROHACKS VANDERBILT UNIVERSITY weekly meetings to work on collaborative code projects (GitHub repository)