

# Kyle CONROY

Department of Astrophysics & Planetary Sciences  
Villanova University  
800 E Lancaster Ave, Villanova PA 19085  
[kyle.conroy@villanova.edu](mailto:kyle.conroy@villanova.edu)  
Web Version

## EDUCATION

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

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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

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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

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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  $\delta$  Sct pulsations and tidally excited modes*

## ORAL PRESENTATIONS

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**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

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**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

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JUNE 2018, JULY 2019	Co-Lead Workshops, including giving tutorials and talks <a href="#">PHOEBE Workshop</a>   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

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PHOEBE	Member of the development team <a href="https://github.com/phoebe-project">github.com/phoebe-project</a>
PHOEBE Website	Author and maintainer of PHOEBE website <a href="https://phoebe-project.org">phoebe-project.org</a>
autofig	Author and maintainer of <code>autofig</code> python plotting package <a href="https://github.com/kecnry/autofig">github.com/kecnry/autofig</a>
nparray	Author and maintainer of <code>nparray</code> python package <a href="https://github.com/kecnry/nparray">github.com/kecnry/nparray</a>
KeplerEBs Website	Author and maintainer of Kepler Eclipsing Binaries web portal <a href="https://keplerEBs.villanova.edu">keplerEBs.villanova.edu</a>

## PROFESSIONAL DEVELOPMENT

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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)
Scientific Organizing Committees	<a href="#">Universe of Binaries</a>   Telč, Czech Republic   September 2019
Local Organizing Committees	<a href="#">PHOEBE Workshop</a>   VILLANOVA UNIVERSITY   June 2018 <a href="#">PHOEBE Workshop</a>   VILLANOVA UNIVERSITY   July 2019
SUMMER 2015	Started departmental ASTROHACKS   VANDERBILT UNIVERSITY weekly meetings to work on collaborative code projects ( <a href="#">GitHub repository</a> )