



PHOEBE: WORKSHOP 3

Physics Of Eclipsing BinariEs

Villanova University, Pennsylvania, USA

FIRST ANNOUNCEMENT:

Due to the success of the first two PHOEBE Workshops, we, the PHOEBE team, are delighted to announce the **Third PHOEBE Workshop** that will take place 22nd June – 3rd July 2020 at Villanova University, Pennsylvania, USA.

THE PHOEBE CODE:

PHOEBE 2 is a rewrite of the PHOEBE legacy code, which was based on the widely acclaimed Wilson-Devinney code. The model includes a new method for stellar surface discretization; photospheric surface mapping of gravity darkening and limb darkening (which replaces the parameterized form); support for spin-orbit misalignment; Doppler boosting; the ability to model exoplanetary transits; and many more features. In addition to this vast array of improvements, the user interface has also been updated and is now based on the python programming language.

WORKSHOP OUTLINE AND OBJECTIVES:

The first week will be directed towards introducing PHOEBE, where participants will attend introductory walk-through tutorials to PHOEBE 2 and will acquire hands-on experience with creating binary star models. They will also be given a sneak peak at advanced features currently under development. By the end of the first week, participants should be able to independently use PHOEBE 2 to model single stars and basic binary systems, have a working knowledge of some advanced features, and have a script to apply PHOEBE 2 to their own data.

The second week will be dedicated to generating more sophisticated PHOEBE models and will concentrate on advanced fitting methods advanced features such as pulsations. The second week will be primarily be of interest to those who have previously attended a PHOEBE Workshop or who will attend week one of the upcoming PHOEBE Workshop. By the end of the second week, participants should be able to model binary systems using advanced features.

IMPORTANT DATES:

Registration deadline: 14th February 2020
Notification of selection: 21st February 2020
Meeting dates: 22nd June -- 3rd July 2020

WEBSITE:

Further details can be found at:
<http://phoebe-project.org/workshops>

REGISTRATION AND FEES:

This workshop is primarily intended for graduate students, postdocs and early career scientists. Registration is free of charge, and includes breakfasts, lunches and the conference dinner; its organization is sponsored by NSF and Villanova University's Department of Astrophysics and Planetary Science. The number of participants is limited to 16. Those interested are invited to apply via the registration form on the workshop website (<http://phoebe-project.org/workshops/registration>).

ORGANIZING COMMITTEE:

Kelly Hambleton (Chair: kelly.hambleton@villanova.edu); Kyle Conroy; Angela Kochoska; Joe Giammarco; Bert Pablo; Dave Jones; Michael Abdul-Masih; Andrej Prša