

PHYSICS SEMINAR

Orbital Period Variation of Eclipsing Binary Star Systems

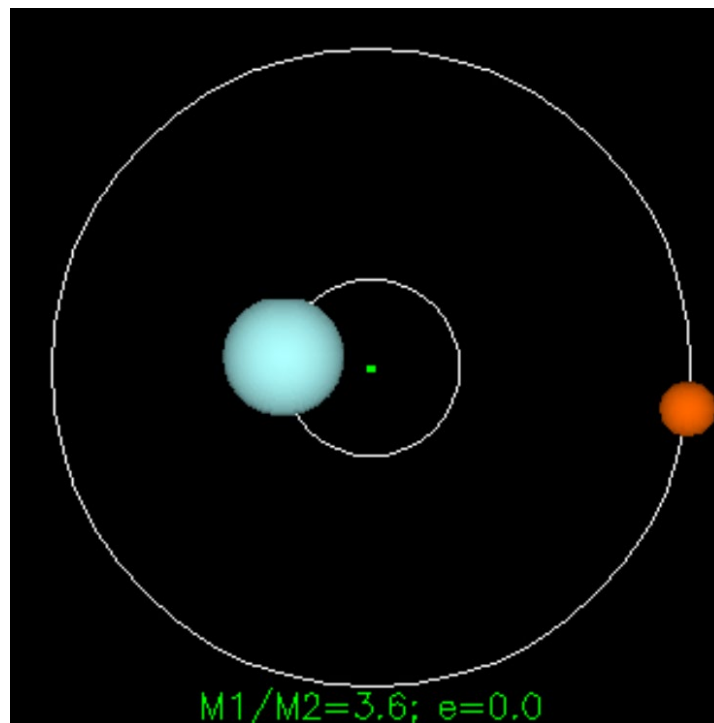
Jaxon Potts, CMU

Thursday, April 23, 2026

12:30 – 1:30 p.m.

Wubben 160

We investigate changes in orbital period of eclipsing binary star systems using archived data from the Mikulski Archive for Space Telescopes (MAST) from observations by the Transiting Exoplanet Survey Satellite (TESS). The light data will be analyzed to construct a linear relationship relating eclipse time and eclipse number. This relationship is used to produce an observed minus calculated (O-C) diagram. A non-zero slope of this O-C diagram indicates a shift of eclipse timing, consistent with mass exchange, loss of angular momentum, or geometric changes of the system.



Refreshments!