

PHYSICS SEMINAR

Exoplanet Validation and Light Curve Modeling

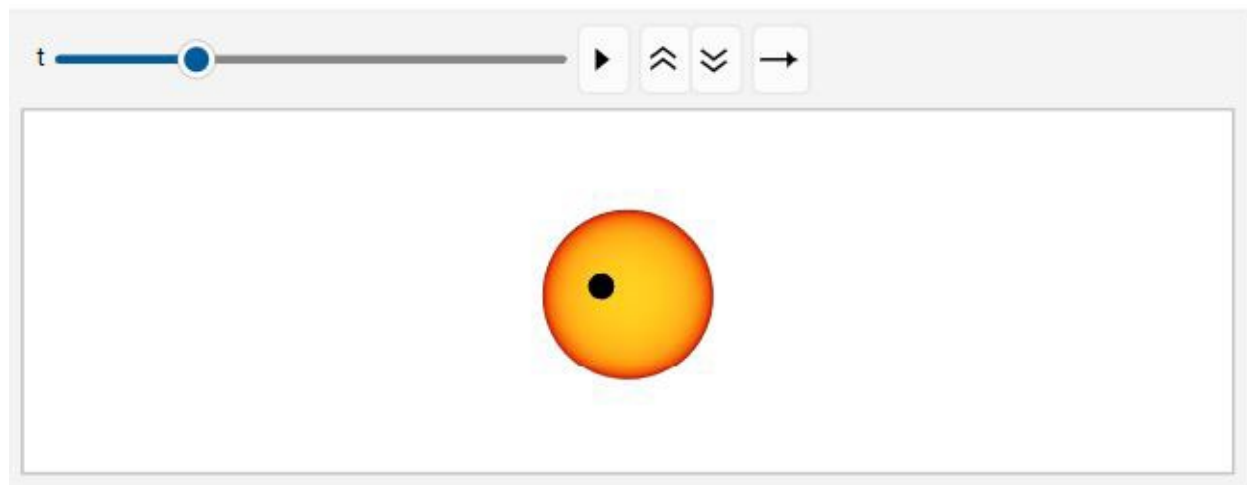
Lizzie Ballard

Thursday, April 2, 2026

12:30 – 1:30 p.m.

Wubben 160

An exoplanet is a planet outside of our solar system. A major focus of exoplanet research is the validation of exoplanet candidates. We use ground-based observations and the transit method to confirm the existence of these potential exoplanets. The transit method involves monitoring the change in flux, or brightness, of a star as its exoplanet passes in front, from the observer's perspective. Telescopes take many images of the star measuring its brightness, resulting in a light curve. This talk will describe light curve mathematics, demonstrate modeling the light curve in Mathematica, and discuss exoplanet candidate validation.



Refreshments!