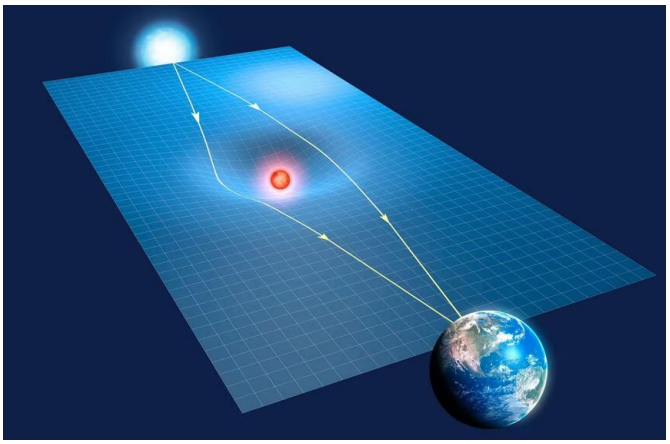
PHYSICS SEMINAR

Gravitational Microlensing in Search for Exoplanets

Peter Leary, CMU

Thursday, November 12, 2026
12:30 – 1:30 p.m.
Wubben 264

The theory of general relativity connects space and time together to explain gravity and the paths taken by light through space. General relativity predicts that when an object passes in front of a source of light it acts as a lens, momentarily increasing the intensity of the light. Such microlensing can detect the change in the curvature of space from the presence of another planet. This is especially useful for detecting exoplanets that our current methods cannot observe. The newly launched Roman telescope hopes to scan the sky and find potential targets that have earth-like exoplanets. Our future work aims to take past data from previous microlensing events in preparation for new Roman data.



Refreshments!