



University
of Victoria

PHYSICS AND ASTRONOMY COLLOQUIUM (In Person & Online)

Dr. Jessie Christiansen
Caltech

“Towards an Exoplanets Demographics Ladder”

Abstract

“The NASA Kepler mission has provided its final planet candidate catalogue, the K2 mission has contributed another four years’ worth of data, and the NASA TESS mission has been churning out new planet discoveries at a rapid pace. The demographics of the exoplanet systems probed by these transiting exoplanet missions are complemented by the demographics probed by other techniques, including radial velocity, microlensing, and direct imaging. I will walk through the progress of the Kepler occurrence rate calculations, including some of the outstanding issues that are being tackled. I will present our new results from K2 and TESS, and outline how K2 and TESS will be able to push the stellar parameter space in which we can explore occurrence rates beyond that examined by Kepler. Finally, I will highlight some of the pieces of the larger demographics puzzle - occurrence rate results from the other techniques that probe different stellar and exoplanet regimes - and progress to be made working to join those pieces together.”

Wednesday, February 15, 2023

3:30 p.m. PST

ECS 116

Zoom link available on Uvic Event Calendar