



**DEPARTMENT OF PHYSICS
COLLOQUIUM SERIES**



**SPEAKER: Dr. Gail Schaefer (GSU/CHARA Array)
Faculty Candidate**

TITLE: Young Binary Stars at High-Spatial Resolution

ABSTRACT: Measuring precise stellar masses is important for understanding how stars form and evolve over their lifetimes. Binary stars are an effective tool for determining accurate dynamical masses that can be used to test different theoretical calculations of stellar evolution. I will discuss high angular resolution observations of pre-main sequence binary stars using adaptive optics imaging and long-baseline optical/infrared interferometry. I will provide an overview of the masses, distances, and orbital alignments measured from observations of young binary and triple stellar systems, and how this impacts our understanding of young stars. Improvements in the sensitivity of long baseline interferometers will open the door to resolving the orbits of many additional binaries in nearby star forming regions.



**Thursday, Jan 23, 2020 – 4:00 p.m.
Workman 101**