BOSTON UNIVERSITY

Boston University College of Arts & Sciences
Institute for Astrophysical Research

2018 - 2019 ASTROPHYSICS SEMINAR SERIES

Exploring Planet Formation in the Nearest Known Protoplanetary Disks

Thousands of extrasolar planets ("exoplanets") have been discovered over the past two decades. Astronomers seeking to understand the astonishing variety of planetary masses and orbital separations that characterize these myriad exoplanet systems, as well as the earliest evolution of our own solar system, must carefully scrutinize exoplanet birthplaces --- i.e., dusty, molecule-rich, “protoplanetary” disks orbiting young stars. I describe recent advances in the study of protoplanetary disks using the recently commissioned Atacama Large Millimeter Array (ALMA) radio interferometer as well as the latest generation of adaptive optics (AO) cameras on the world’s largest (8-meter -class) optical/infrared telescopes. My talk will focus on ALMA and AO studies of the nearest-known disks; these young neighbors afford opportunities to image disk structures and chemistry on solar system size scales.

Monday, November 12th
3:30 - 4:30 p.m.
725 Commonwealth Avenue | Room 502

Joel Kastner
Rochester Institute of Technology