

Astrophysics Seminar

Wednesday, April 22, 2015

Chasing Proto-planetary Disks and High-z Galaxies with the LMT

James Lowenthal

Smith College

Department of Astronomy

3:15 pm

Refreshments
CAS Room 502

3:30 pm

Seminar
CAS Room 502

Next Week

- *Jason Eastman*
Center for Astrophysics
- MINERVA: The
MINiature Exoplanet
Radial Velocity Array

Abstract:

The 50-meter Large Millimeter Telescope (LMT) — a joint project of UMass Amherst and INAOE, Mexico — is nearing completion on 5000m Sierra La Negra, and is now operating with a 32-m surface in “Early Science” mode. Some of the most luminous galaxies in the Universe are dusty starbursts at redshifts $z > 4$ that are invisible in the optical but easily detected at 1-3 mm with LMT. I will review the status of this new facility and some of its recent results, including redshifts measured using CO emission lines, resolution of previously blended Herschel sources, gravitationally lensed submillimeter galaxies out to $z \sim 5$, and dust maps of proto-planetary disks in nearby Galactic star-forming regions.

