

Department of Physics & Astronomy

Dr. Daniel Jaffe

Professor and Department Chair ,

Department of Astronomy

University of Texas at Austin

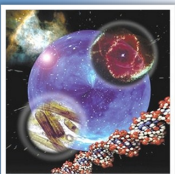
Friday, March 29, 2013

3:00 p.m. - 4:00 p.m.

BB 3.04.18

Young Brown Dwarfs and Planetary Mass Objects

Groups and associations of newly formed stars also contain gravitationally bound, self-luminous objects that are not massive enough to support nuclear fusion in their cores. These objects, ranging in mass from a few to ~ 100 times the mass of Jupiter, shine by releasing gravitational potential energy. Many of these brown dwarfs have disks like those surrounding their more massive stellar counterparts and may be forming their own planets. We describe a program to find and characterize young objects with extremely low masses to understand their origins and to be able to use them as a laboratory for planet formation. We will also describe a long-term program to develop new tools for infrared spectroscopy including dispersive devices made using nanolithographic patterning of silicon.



Department Contact Information

Dr. Marcelo Marucho • 210.458.7862 • Marcelo.Marucho@utsa.edu

Nakia Scott • 210.458.5698 • Nakia.Scott@utsa.edu

<http://physics.utsa.edu/>