DEPARTMENT OF PHYSICS AND ASTRONOMY
COLLOQUIUM IN-PERSON ONLY EVENT

Characterizing the Realistic Evolution of Planet-Forming Disks

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Planets are formed in protoplanetary disks of gas and dust around young stars. Where and when a planet forms determines its ultimate composition. However, our ability to determine exoplanet compositions from observations is extremely limited. To truly understand what planets are made of we must instead observe the planet-forming material in the natal disk. These protoplanetary disks are dynamic objects. Material moves through the disk, experiencing a wide range of temperature, irradiation, and ionization conditions. Simultaneously, chemical reactions change the composition of the disk material. I will explore how observations over the past decade with ALMA and now JWST have given us new insights into the changing composition of protoplanetary disks. I will also show how combining observations and chemical models enable a holistic understanding of the physical and chemical conditions during planet formation.

Tuesday, February 10, at 2:55 PM

IN-PERSON EVENT ROOM 322

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