

The Keck Institute for Space Studies presents an open lecture:

## Dusty Planetary Systems

and the Hunt for Planets

Professor Farisa Morales
JPL/Moorpark College/CSUN

Monday, August 13, 2018

4:30 PM Refreshments 5:00 PM Lecture

Lees-Kubota Lecture Hall
Guggenheim Building
California Institute of Technology

Understanding how planets and planetary systems form is critical to understanding the stages of planetary development and the uniqueness of our Solar System. The current understanding of formation is that planets and their star form from a collapsing cloud of gas and dust, or nebula. The resulting disk contains a central young star surrounded by the material needed to build planets. Over millions of years, disk material aggregates and grows into a number of planets, leaving little material left in the disk. Until relatively recently, the only example of a planetary system has been our own; however, over the past few decades the detection of exoplanets has shown the diversity of planets and planetary systems and contributed to our understanding of how planetary systems form. Astronomers study other solar systems to address fundamental questions about our knowledge and place in the universe, such as "how does the universe work" and "are we alone"?

Professor Farisa Morales will share content about planetary system formation, leading us to explore the uniqueness of our Solar System. She will also include information about the tools and techniques scientists are currently using to study these systems. Finally, Prof. Morales will speak to the formation of planets in disks, and ongoing efforts to detect them.

Seating is limited and is available on a first come, first served basis.