

# Physics & Astronomy Colloquium

Presents

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Thursday, March 28, 2019  
4:10 pm, Webster Room 17

## Observational Planet Formation

Planets form in gaseous protoplanetary disks surrounding newborn stars. As such, the most direct way to learn how they form from observations, is to directly watch them forming in disks. In the past, this was difficult due to a lack of observational capability, and planet formation was a subject of theoretical research. Now, thanks to a fleet of new instruments with unprecedented resolving power that have come online in the past decade, we have just started to unveil features in resolved images of protoplanetary disks, such as gaps and spiral arms, that are most likely associated with embedded (unseen) planets. By comparing observations with theoretical models of planet-disk interactions, the properties of these still forming planets may be constrained. Such planets help us test planet formation models. This marks the onset of a new field: observational planet formation. I will introduce the current status of this field, highlight some of the latest developments, and discuss where this field is heading.

*Please meet our guest speaker and share in refreshments,  
3:45-4:10 p.m. in the foyer on floor G above the lecture hall*

Host: Dr. Guy Worthey