

## Towards an Understanding of Exoplanetary Composition

## **Jonathan Fortney**

UC Santa Cruz

Nearly all of the narratives about understanding the composition of planets come from our understanding of the solar system. However, this is a terribly small sample size. In this talk I will cover several topics that shed light on exoplanetary composition. In the realm of transiting planets, we can use structure models and Hubble spectroscopy to determine the mass-metallicity relation for giant planets, for the first time. In tandem we are developing new theoretical tools to extract constraints on atmospheric abundances from the spectra of brown dwarfs and giant planets to look for composition clues that distinguish these two populations. As a whole these advances will yield fundamentally new insights on planetary formation and evolution.



4:00pm in CAS 502. Refreshments served at 3:45pm in CAS 500.



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