

**Freitag, 23. November 2018, 15 Uhr c.t. im Hörsaal I des Physikalischen Instituts**

**Ravit Helled**

University of Zurich

## „Understanding Gas Giant Planets“

Planets are common astrophysical objects. Giant planets, which are massive planets made of mostly hydrogen and helium, are the first planets to form in planetary systems, and due to their large masses they affect the dynamical evolution of the system. In addition, giant planets reveal critical information on the planetary birth environment and the formation process.

Gas giants are thought to have cores in their deep interiors, and the division into a heavy-element core and hydrogen-helium envelope is applied in both formation and internal structure models. In the talk will briefly summarize giant planet formation models, and will show that the primordial internal structure of giant planets depends on their formation location and growth history. I will present the expected primordial and current-state internal structure of Jupiter from new formation and evolution models. Finally, I will discuss the importance of these results for interpreting the measurements of the ongoing Juno (NASA) mission and for the characterization of giant exoplanets.



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Nach dem Kolloquium gibt es im Seminarraum 1 (2. Stock, Zi. 2.005) die Gelegenheit, bei Kaffee und Kuchen mit der Vortragenden zu diskutieren.