



OCTOBER
21
2019
Irchel
Campus
Y16 G15
4:15 pm



SCHRÖDINGER

COLLOQUIUM

SERIES

www.physik.uzh.ch/schroedinger

PROF. DAVID STEVENSON

Caltech, USA

Jupiter's Interior as revealed by Juno

Jupiter is in the class of planets that we call gas giants, not because they consist of gas but because they were primarily made from hydrogen-helium gas, which upon gravitational compression becomes a metallic fluid. Juno, in orbit about Jupiter since 2016, has changed our view: The planet may have a diluted central concentration of heavy elements, consistent with current ideas of formation.

It has winds that are limited by magnetic effects but extend to ~3000km in depth and are evident in the gravity field.

It has a distinctive magnetic field and evidence for secular variation consistent with those winds, and an atmosphere that is surprisingly inhomogeneous because of the peculiarities of the water-ammonia phase diagram. However, Juno is ongoing; it has not answered all questions and has posed new ones.

