"Weather and Climate on Neutron Stars: Connecting Surface Flow Theory and Observations"

April 4-7, 2022

Many neutron stars have atmospheres and oceans, which flow and vary in space and time. But, unlike planets such as the Earth or Jupiter, the strong surface gravity and fast rotation of a neutron star present extreme weather and climate conditions (short and long time-scale flows, respectively). Understanding how the turbulent flows on neutron stars influence emission mechanisms and processes is crucial for interpreting current and upcoming X-ray observations. Bringing together a diverse set of speakers from fluid dynamics, geophysics and planetary physics, high-energy astrophysics, plasma physics, as well as observers, this workshop will offer a unique opportunity to advance our understanding of neutron star physics and to establish broad connections across the different disciplines, as well stronger links with observations.

Princeton University
Jadwin Hall, Fourth Floor, Room 407, PCTS Seminar Room

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