On the shoulders of giants



Contribution ID: 10 Type: Oral contribution

Water delivery to inner rocky planets driven by outer giants (invited talk)

Wednesday 25 March 2026 12:05 (30 minutes)

The growth of outer gas giants naturally destabilizes the orbits of nearby planetesimals. These are scattered in all directions – many are ejected, but some are scattered inward toward the growing rocky planets (if they exist). In the Solar System, both the C-type asteroids and water delivery to Earth can be explained as a simple byproduct of Jupiter and Saturn's growth. I will explain the dynamics at play, and extrapolate to exoplanet systems with a range of orbital architectures.

Presenter: Dr RAYMOND, Sean (Laboratoire d'Astrophysique de Bordeaux, France)

Session Classification: Formation of gaseous giant planets and their impact on inner low-mass planets in the habitable zone: from solar system to exoplanetary systems