

**Author: M. SAILLENFEST**

Università di Pisa (Italy) - Observatoire de Paris (France)

**Title:** *“Secular representations for the long-term dynamics beyond Neptune”*

**Abstract.** I will present the development and the application of semi-analytical secular models, designed to describe generically the long-term dynamics of transneptunian objects. One-degree-of-freedom systems are obtained in both the non-resonant and resonant cases, allowing to represent every possible trajectory by the level curves of the Hamiltonian. The application to known objects reveals pathways to high perihelion distances. In particular, distant resonant objects can be tracked back to their resonance capture. The effect of a potential external perturber will be also discussed.