

Formation and evolution of the circumjovian disk

Adapting the hydrodynamical code PHYVE (designed for protoplanetary disks) to the formation of a proto-Jupiter system, we follow the formation and evolution of the disk surrounding the proto-Jupiter.

This disk is fed by the protoplanetary disk itself and we follow the circumJovian disk evolution based on environmental parameters inherited from the simulations of Baillié et al., 2019.

We follow the evolution of the surface mass density profile, but also the disk composition and geometry.

We investigate the question of satellite traps, similar to planet traps in protoplanetary disks.