



Contribution ID: 34

Type: Talk

On The Secular Evolution of GG Tau A Circumbinary Disc: A Misaligned Disc Scenario

Wednesday 27 June 2018 12:00 (20 minutes)

The binary system GG Tau A is observed to have a circumbinary disc with a dust ring located further out than expected from tidal truncation theory. Given the binary separation, this large cavity can be explained by relaxing the assumption of a co-planar disc and instead fit the observations with a mis-aligned circumbinary disc around an eccentric binary with a wider semi-major axis. I present the results of SPH simulations to check this possibility and investigate the long term evolution of such a system. I find that a misalignment angle of 30 degrees and a binary eccentricity of 0.45 fit both the astrometric data and the disc cavity.

Primary author: HOSSAM, Aly (University of Milan)

Presenter: HOSSAM, Aly (University of Milan)

Session Classification: Protoplanetary disks (chair R. Garcia Lopez)