N-body systems with with long-range interactions: Relaxation and radial orbit instability [P.3]

Pierfrancesco Di Cintio
IFAC-CNR and INFN-Firenze
With: Luca Ciotti & Carlo Nipoti (UNIBO)

Collisionless Boltzmann (Vlasov) Equation and Modeling of
Self-Gravitating Systems and Plasmas
October 30 - November 3, 2017

- We study collisionless processes in systems with additive $r^{-\alpha}$ forces
- Relaxation and phase-mixing in cold dissipationess collapses
- Consistency and stability of anisotropic Osipkov-Merritt equilibria
- Analysis of end products of unstable models
- Connections with MOND systems