SwissMAP Annual General Meeting



Contribution ID: 19

equations.

Type: not specified

Colloquium: Stability and singular limits in plasma physics

Monday 12 September 2022 11:15 (1 hour)

In this colloquium we will present two kinetic models that are used to describe the evolution of charged particles in plasmas: the Vlasov-Poisson system and the Vlasov-Poisson system with massless electrons. These systems model respectively the evolution of electrons, and ions in a plasma. We will discuss the well-posedness of these systems, the stability of solutions, and their behaviour under singular limits. Finally, we will introduce a new class of Wasserstein-type distances specifically designed to tackle stability questions for kinetic

Presenter: IACOBELLI, Mikaela (ETHZ)