

Workshop

Analysis of transport equations:

Vlasov and related models

Talk given by

Frédéric Rousset

Title. *Quasineutral limit for Vlasov-Poisson systems.*

Abstract. We shall study the quasi-neutral limit of the Vlasov-Poisson system. This is a very singular limit due to the presence of the two streams instability in plasmas. We will justify this limit and prove the well-posedness of the limit system for initial data in Sobolev spaces for which the profile in the velocity variable satisfies a stability condition (joint work with D. Han-Kwan).