

Workshop

Analysis of transport equations:

Vlasov and related models

Abstract of the talk given by

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The so-called hypocoercive methods are a fundamental tool to show quantitative exponential return to the equilibrium for a large class of inhomogeneous kinetic equations. They are based on commutator estimates of microlocal inspiration. In this talk we will show how to adapt them to the discrete or semi-discrete case, even if the notion of discrete commutators is hard to use and the notion of discrete equilibrium is ambiguous. We will also speak of the homogeneous case which is a non trivial step of the analysis. This is a joint work with Pauline Laffite (Centrale-supelec) and Guillaume Dujardin (Lille).