

## **Maxime Hauray (Université d'Aix-Marseille) - Propagation of chaos for the 3D homogenous Landau equation with moderality soft potential**

*jeudi 19 octobre 2017 14:45 (40 minutes)*

I will present results obtained in collaboration with Nicolas Fournier, on the propagation of chaos for the Landau equation.

The difficulty here is the presence of a singularity in the interaction kernel that appears in equation.

For mild singularities, we obtain quantitative results of convergence using a weak-strong stability result for the Landau equation, and a perturbation of it, that allows to apply it also to empirical measures associated to particles system approximating the Landau equation.

For stronger singularity, we obtain a qualitative result of convergence, relying on the techniques introduced previously with Stéphane Mischler for the case of vortex, but with several improvement in order to control the possibly degenerate Landau diffusion.