

# Anwar El Rhirhayi, IDP-Orléans: Langevin Approach to the Landau Equation through Large Deviations.

*mercredi 14 mai 2025 14:30 (30 minutes)*

Our goal is to study the Landau equation through the Langevin approach. We will show that this method recovers the same large deviation Hamiltonian as the one derived by Landau and Boltzmann. Then, we will attempt to connect it with Rostoker's principle by studying a three-body system. Our initial objective is to demonstrate the equivalence of both methods in the limit of an infinitesimal scattering time. Finally, we aim to investigate energy conservation within the Langevin framework.

- References: <https://arxiv.org/abs/2410.12079>

<https://arxiv.org/abs/2002.10398>

<https://arxiv.org/abs/2101.04455>