

# Kinetic and weak-coupling limit for some microscopic models

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## **Abstract**

I discuss kinetic theory of some microscopic model such as Hamiltonian systems and Coagulation-Fragmentation processes. These models are macroscopically described by Boltzmann Equation, Landau Equation and Smoluchowski Equation. I review some of the known results and formulate some conjectures on the connection between the macroscopic description and the microscopic details of the aforementioned models.