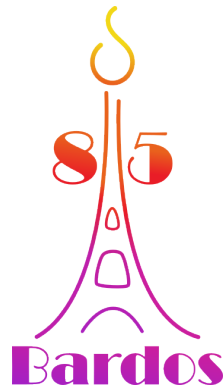


Kinetic equations and turbulence

Fisher information for the space-homogeneous Boltzmann equation

Cyril Imbert

In this talk, we will see that the Fisher information of a solution of the space-homogeneous Boltzmann equation decreases along time in physically relevant cases such as inverse power-law potentials and hard spheres in dimension 2 and 3. It covers the case of very soft potentials. Moreover, it implies that solutions are smooth if the initial condition decays sufficiently fast. This work is joint with L. Silvestre and C. Villani.



In honor of Claude Bardos's 85th birthday