Kinetic Seminar

Propagation of moments and sharp convergence rates for the non-cutoff Boltzmann equation with soft potentials

by

Professor Lingbing HE
Tsinghua University

Abstract :

We consider the well-posedness for the non-cutoff Boltzmann equation with soft potentials when the initial datum is close to the Maxwellian and has only polynomial decay at the large velocities in L^2 space. As a result, we get the propagation of the exponential moments and the sharp rates of the convergence to the Maxwellian which seems the first results for the original equation with soft potentials. The new ingredients of the proof lie in localized techniques, the semigroup method as well as the propagation of the polynomial and exponential moments in L^2 space.

Date :	June 1, 2022 (Wednesday)
Time :	10:30am – 11:30am (Hong Kong SAR)
ZOOM Meeting ID :	948 9989 1705
Passcode :	20220601

All are Welcome