

L^1 -stability theory of the Boltzmann equation

Seung-Yeal Ha
Department of Mathematics
Seoul National University

Abstract

In this talk, I will survey a recent progress for the L^1 -stability theory of the Boltzmann equation. The uniform L^1 -stability of mild solutions to the Boltzmann equation will be obtained via a robust nonlinear functional which is equivalent to the L^1 -distance between two solutions. This functional satisfies a Lyapunov estimate that is monotone decreasing along mild solutions in time t .