

Correlation among elemental relaxation and driven-flow problems for a rarefied gas

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In this talk, we consider a rarefied gas between two parallel plates and discuss the correlation among elemental relaxation and driven-flow problems described by the linearized Boltzmann equation. Propagation of the discontinuities of the velocity distribution function and its derivative is also discussed from the viewpoint of the above correlation. Numerical demonstration based on the Bhatnagar-Gross-Krook (or the Boltzmann-Krook-Welander) model will be presented. This is a joint work with Masashi Oishi.