

Inflow Problems for a One-dimensional Isentropic Model System of Compressible Viscous Gas

Akitaka Matsumura
Osaka University, Japan
Email: `akitaka@math.sci.osaka-u.ac.jp`

In this talk, we consider time-asymptotic behaviors of the solutions to initial boundary value problems in the half space for a one-dimensional isentropic model system of compressible viscous gas. We first recall recent results on the inflow problem where the velocity on the boundary is given as a constant inward flow, and next, as a closely related problem, discuss a solid-gas free boundary value problem where we can give a proof of time-global existence.