Inflow problems for a one-dimensional isentropic model system of compressible viscous gas

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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.