

**H-theorem, regularization, and boundary conditions  
for the linearized 13 moment equations**

Henning Struchtrup  
Department of Mechanical Engineering, University of Victoria, Canada

A H-theorem for the linearized Grad 13 moment equations leads to regularizing constitutive equations for higher fluxes and to a complete set of boundary conditions. Solutions for Couette and Poiseuille flows show good agreement to DSMC simulations. The Knudsen minimum for the relative mass flow rate is reproduced.