

**Jan Giesselmann**

*Derivation of entropy inequalities at interfaces via asymptotic analysis*

This talk will focus on entropy inequalities at phase boundaries in sharp interface models. We begin by briefly showing a general framework for entropy inequalities at phase boundaries. Then we will explain how entropy inequalities in diffuse interface models imply entropy inequalities at the interfaces in the corresponding sharp interface limits. Moreover, we will - in the special case of the Navier-Stokes-Korteweg model - show how entropy inequalities are a natural admissibility criterion for kinetic relations obtained by e.g. asymptotic analysis.