



Oberseminar Mathematische Strömungsmechanik

Institut für Mathematik der Julius-Maximilians-Universität Würzburg

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On diffusion for models of gas mixtures

Abstract:

We consider a fluid description of a gas mixture and would like to model its diffusion. We propose to derive this by starting out from a multi-component kinetic model. By expanding the distribution functions of this kinetic mixture model as a truncated Hilbert expansion we work towards the goal of deriving the zeroth-order and first-order fluid equations. The latter will give expressions for the diffusion terms. Also numerical experiments towards this goal are presented.

Raum 40.03.003 (Mathematikgebäude Ost)

Dienstag, der 17. Dez. 2019 um 13 Uhr

Zu diesem Vortrag sind Sie herzlich eingeladen.

gez. Christian Klingenberg