

Declaration of Contributions

The research paper "Lattice Boltzmann method for thin-liquid-film hydrodynamics", submitted to Physical Review E in 2019, is a collaborative work by S. Zitz, A. Scagliarini, S. Maddu, A. A. Darhuber, J. Harting. Their respective contributions are:

Stefan Zitz: Production ready development of the lattice Boltzmann method as described in section II, performed the simulations presented in the paper, analyzed the simulation results, generated the figures and wrote section III, IV and V.


Andrea Scagliarini: Derived the mapping conditions that connect the thin film model with the shallow water lattice Boltzmann model and wrote section I and II.

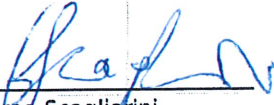
Suryanarayana Maddu: Wrote and validated the first prototype of the code.

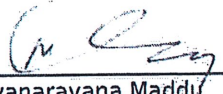
Anton A. Darhuber: Contributed numerous suggestions for a more thorough literature review during proofreading and helped answering the referees reports.

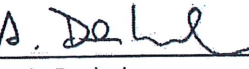
Jens Harting: served in an advisory role in the design and the execution of the research, provided guidance in the literature research, contributed to the interpretation of the results, provided corrections in the proofreading phase.

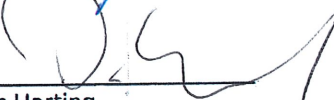
I herewith confirm the veracity of the above declaration of contributions:

X 
Stefan Zitz

X 
Andrea Scagliarini

X 
Suryanarayana Maddu

X 
Anton A. Darhuber

X 
Jens Harting