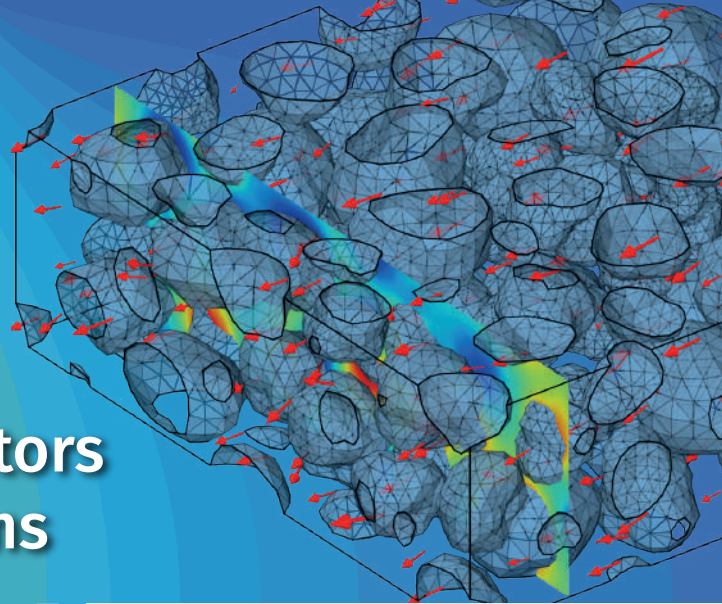# AMaSiS 2021
Applied Mathematics and Simulation for Semiconductors and Electrochemical Systems

AMaSiS 2021 is an interdisciplinary workshop dedicated to mathematical modeling of semiconductors and electrochemical systems. Due to inherent similarities between both disciplines, AMaSiS 2021 explores synergies in mathematical modeling, analysis, numerics, and simulation techniques. The conference brings together experts from applied mathematics, physics, engineering, chemistry, and material science and covers the following topics:

- electronic structure theory (density functional theory, tight-binding, effective mass models)
- non-equilibrium thermodynamics and transport theory (drift-diffusion models, heat flow, kinetics, non-equilibrium Green's functions)
- mathematical upscaling from quantum mechanical models and particle systems to continuum scale (homogenization, asymptotic methods)
- semiconductor devices (LEDs, transistors, etc.)
- electrochemical systems (fundamental electrochemistry, batteries, fuel cells, photo-catalysis)

Invited Speakers

G. Allaire (CMAP Paris)
C. Chainais-Hillairet (U Lille 1)
M. Eikerling (FZ Jülich)
U. Krewer (TU Braunschweig)
A. Latz (HI Ulm)
M. Liero (WIAS Berlin)

J. Maier (MPI Stuttgart)
E. O'Reilly (U Cork, Tyndall Institute)
F. Römer (U Erlangen-Nuremberg)
S. Schulz (Tyndall Institute)
M. Todorova (MPIE Düsseldorf)
A. van der Ven (UC Santa Barbara)

Contact

amasis2021@wias-berlin.de
www.wias-berlin.de/workshops/amasis2021

Support

September 6–9, 2021

Online conference
Organized by the Weierstrass Institute to be held on Zoom (talks) and Gather.town (session breaks, poster session).

Deadlines
Abstract submission   June 11, 2021
Notification of acceptance   June 30, 2021

Call for Papers
We welcome abstracts for contributed talks or posters. See the workshop website for more information.

Conference Fee
Participation at the workshop is free of charge, but registration is required.

Organizers
Jürgen Fuhrmann (WIAS Berlin)
Annegret Glitzky (WIAS Berlin)
Ansgar Jüngel (TU Vienna)
Hans-Christoph Kaiser (WIAS Berlin)
Markus Kantner (WIAS Berlin)
Manuel Landstorfer (WIAS Berlin)
Oliver Marquardt (WIAS Berlin)