EMRM 2023

Sept. 13–15, 2023
WIAS Berlin
Germany

Energetic Methods for Multi-Component Reactive Mixtures
Modelling, Stability, Asymptotic Analysis

Important Dates 2023

Abstract submission	June 30
Notification of acceptance	July 16
Early-bird registration	July 31
Standard registration	Sept. 10

Conference Fee

Early bird	80 €
Standard	100 €

Conference dinner inclusive.

Call for Papers

Participants may submit an abstract for a contributed talk or poster.

Organizers

Katharina Hopf (WIAS Berlin)
Ansgar Jüngel (TU Wien)
Michael Kniely (WIAS Berlin)

Venue

WIAS Berlin
Mohrenstrasse 39
10117 Berlin, Germany

Contact

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wias-berlin.de/workshops/EMRM2023

EMRM 2023 is devoted to the mathematical analysis of PDE models for multi-component reactive mixtures. Main topics are

- diffusion models,
- hydrodynamic models,
- hyperbolic–parabolic systems,
- asymptotic analysis.

The workshop places particular emphasis on methods based on an energy or entropy structure, which have proved crucial for questions concerning existence, stability, and the study of asymptotic limits. EMRM 2023 will specifically address problems related to

- chemical reaction–diffusion processes,
- biological transport and cross-diffusion phenomena,
- multi-phase flows in hydrodynamics.

A key challenge is the intrinsic interaction between different constituents with further effects such as heat conduction, electrostatic forces, and compressibility.

EMRM 2023 shall provide a platform for experts and early-career researchers to discuss current research results and future directions.

Invited Speakers

Miroslav Bulíček	Charles University, Prague
Martin Burger	DESY & University of Hamburg
Cleopatra Christoforou	University of Cyprus, Nicosia
Virginie Ehrlacher	École des Ponts ParisTech
Klemens Fellner	University of Graz
Julian Fischer	ISTA, Klosterneuburg
Vincent Giovangigli	École Polytechnique, Palaiseau
Benoît Perthame	Sorbonne Université, Paris
Agnieszka Świerczewska-Gwiazda	University of Warsaw
Ewelina Zatorska	Imperial College London

Support

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Weierstrass Institute for
Applied Analysis and Stochastics