Dear Colleagues,

the second edition of the

Kaiserslautern Applied and Industrial Mathematics Days – KLAIM
will take place in Kaiserslautern, Germany, from September 25\textsuperscript{th}-27\textsuperscript{th}, 2023.

The purpose of this workshop is to provide a forum for applied mathematicians from academia, research labs and industry to exchange ideas and to showcase recent results. After the successful start of this new conference series in 2021, we continue this year with the second edition of KLAIM, putting emphasis on the \textit{Synthesis of Models and Data}.

This thematic focus addresses in particular the combination of model-based approaches and data-driven techniques, leading thus to \textit{hybrid learning frameworks}. The workshop is hosted jointly by the Fraunhofer-Institute for Industrial Mathematics ITWM and the Department of Mathematics at the Rheinland-Pfälzische Universität Kaiserslautern-Landau (RPTU).

The program will be structured along the five tracks

1. Models and Data across Scales and Domains in Engineering Applications.
   This track is in collaboration with the ECMI Special Interest Group “Math for the Digital Factory”.
2. Risk Management and Machine Learning
3. Simulation and Optimization in Fluid Dynamics
4. Mathematical Programming: Uncertain Data and Multiple Objectives
5. Analyzing Materials Structures: Images, Machine Learning and Stochastic Geometry

Besides we plan a special session about mathematical research data.

**Keynote Speakers**

- Peter Benner (MPI Magdeburg)
- Robert Bixby (Rice University)
- Jörg Fehr (Universität Stuttgart)
- Gitta Kutyniok (LMU München)
- Ivana Ljubic (Universität Wien)
- Eliza O’Reilly (Cal Tech)
- Matthias Scherer (TU München)
- Karl-Heinz Küfer (Fraunhofer ITWM)
- Alessandra Micheletti (University of Milan)
- Mario Ohlberger (Universität Münster)
- René Pinnau (RPTU)
- Kevin Sturm (TU Wien)

**Scientific Committee**

- Klaus Dreßler (Fraunhofer ITWM)
- Michael Günther (Bergische Universität Wuppertal)
- Ralf Korn (RPTU, Fraunhofer ITWM)
- Nataša Krejić (University of Novi Sad)
- Karl-Heinz Küfer (Fraunhofer ITWM)
- Alessandra Micheletti (University of Milan)
- Mario Ohlberger (Universität Münster)
- René Pinnau (RPTU)
- Klaus Dreßler (Fraunhofer ITWM)
- Michael Günther (Bergische Universität Wuppertal)
- Ralf Korn (RPTU, Fraunhofer ITWM)
- Nataša Krejić (University of Novi Sad)
Registration

Registration is now open. We invite prospective speakers to submit a one-page abstract to one of the above five tracks. Please follow the instructions at the website below for registration and submission procedure.

The conference fee is 220 EUR.

Deadlines

- Submission of abstracts:        June 19th, 2023 (strict deadline)
- Notification of acceptance:    July 3rd, 2023
- Registration and payment of conference fee: August 18th, 2023
- For late registrations after August 18th, the conference fee is 270 EUR.

Find out more at: www.itwm.fraunhofer.de/klaim2023

For questions write to us at: KLAIM@mathematik.uni-kl.de

We are looking forward to seeing you in Kaiserslautern.

On behalf of the local organizing committee

Anita Schöbel
Bernd Simeon