

MATH MEETS INDUSTRY October 5, 2022

09.00 am – 10.00 am	Registration and Welcome
10.00 am – 10.30 am	Keynote Lecture: Jörg Fehr (University of Stuttgart, ITM) <i>“Industrial Consortium SimTech - Examples of Joint Research between Academia and Industry; Model Reduction, Virtual Commissioning and Vehicle Safety.”</i>
10.30 am – 11.00 am	Keynote Lecture: Johannes von Keler (Robert Bosch GmbH) <i>“Application of uncertainty quantification and statistical validation to quantify the credibility of simulations for virtual engineering”</i>
11.00 am – 11.30 am	Keynote Lecture: Andrea Beck (University of Stuttgart, IAG) <i>“When Machine Learning meets Computational Fluid Dynamics...”</i>
11.30 am – 12.00 pm	Keynote Lecture: Uwe Iben, M. Geisel, D. Kreuter (Robert Bosch GmbH) <i>“TorchPhysics – Python library for Physics Informed Neural Networks”</i>
01.30 pm – 02.00 pm	Keynote Lecture: Michael Schick (Robert Bosch GmbH) <i>“Mathematical activities in Bosch research”</i>
02.00 pm – 02.30 pm	Keynote Lecture: Bernard Haasdonk (University of Stuttgart, IANS) <i>“Kernel Methods for Efficient Surrogate Modelling”</i>
02.30 pm – 03.00 pm	Keynote Lecture: André Gerlach, J. Eisele (Robert Bosch GmbH) <i>“Artificial Intelligence for sensor systems in acoustics”</i>
03.00 pm – 03.30 pm	Keynote Lecture: Bernadette Hahn-Rigaud (University of Stuttgart, IMNG) <i>„(TBA)“</i>
04.00 pm – 04.10 pm	Science Slam: NN
04.10 pm – 04.20 pm	Science Slam: NN
04.20 pm – 04.30 pm	Science Slam: NN
04.30 pm – 04.40 pm	Science Slam: NN
04.40 pm – 04.50 pm	Science Slam: NN
04.50 pm – 05.00 pm	Science Slam: NN
05.00 pm – 05.10 pm	Science Slam: NN
05.10 pm – 05.20 pm	Science Slam: NN
05.20 pm – 05.30 pm	Science Slam: NN
05.30 pm – 05.40 pm	Science Slam: NN
05.40 pm – 05.50 pm	Science Slam: NN
05.50 pm – 06.00 pm	Science Slam: NN
06.00 pm – 06.10 pm	Science Slam: NN
06.15 pm – 06.30 pm	Award Ceremony Science Slam
06.30 pm	Get Together

MATH MEETS INDUSTRY October 6, 2022

09.00 am - 09.30 am	Welcome with Coffee
09.30 am - 10.00 am	Keynote Lecture: Andreas Klein (Robert Bosch GmbH) <i>"Connecting different abstraction levels: a major challenge in physical modeling"</i>
10.00 am - 10.30 am	Keynote Lecture: Dominik Göddeke (University of Stuttgart, IANS) <i>"A cross-platform, high-performance SPH toolkit for image-based flow simulations on the pore scale of porous media"</i>
10.30 am - 11.00 am	Keynote Lecture: Oliver Lenord, A. Klein, A. Fischer (Robert Bosch GmbH) <i>"Physics-inspired neural network architecture to accelerate solving non-linear PDE problems in fluid dynamics"</i>
11.00 am - 11.30 am	Keynote Lecture: NN (University of Stuttgart) <i>"(TBA)"</i>
11.45 am - 12.15 pm	Results from the Student's Competition
12.15 pm - 12.30 pm	Award Ceremony Student's Competition
12.30 pm	Closing

