

Workshop
“Multifidelity Methods for Stochastic and Uncertain Problems”

February 2 - 6, 2026

organized by
Emil Løvbak, Steffen W. R. Werner

Time measurement: CET

• **Monday, February 2**

08:30 - 09:00	<i>Arrival and Self-Registration</i>
09:00 - 09:05	<i>Welcome by HIM Director Stefan Müller (TBD)</i>
09:05 - 10:05	Aretha Teckentrup <i>Multilevel Monte Carlo Methods with Smoothing</i>
10:05 - 11:00	<i>Coffee break</i>
11:00 - 12:00	Tommaso Vanzan <i>Sparse and multi-level approximations for PDE-constrained optimization under uncertainty</i>
12:00 - 14:30	<i>Lunch break</i>
14:30 - 15:30	Free discussion time
15:30 - 16:15	<i>Coffee break</i>
16:15 - 17:15	Steffen W.R. Werner <i>Interpolatory Model Reduction for Structured Stochastic and Nonlinear Systems</i>
from 17:15 on	<i>Get-Together</i>

- **Tuesday, February 3**

09:00 - 10:00	Giovanni Samaey <i>Multilevel Markov chain and interacting particle methods for Bayesian inverse problems</i>
10:00 - 10:45	<i>Coffee break</i>
10:45 - 11:45	Josef Martínek <i>Multilevel Sequential Monte Carlo for Bayesian Inverse Problems with Random Likelihoods</i>
11:45 - 14:30	<i>Group Photo and Lunch break</i>
14:30 - 15:30	Free discussion time
15:30 - 16:15	<i>Coffee break</i>
16:15 - 17:15	TÙNG LÊ <i>Parametric regularity for non-linear PDEs</i>

- **Wednesday, February 4**

09:00 - 10:00	Sebastian Krumscheid <i>Beyond Expectations: Multilevel Monte Carlo Methods for Comprehensive Uncertainty Quantification</i>
10:00 - 10:30	<i>Coffee break</i>
10:30 - 11:30	David Schneiderhan <i>Multilevel Stochastic Gradient Descent for Risk-Averse PDE Constraint Optimization</i>
11:30 - 12:30	Dániel Hajnal <i>Multifidelity Monte Carlo framework for photon dose uncertainty quantification</i>
12:30 - 13:45	<i>Lunch break</i>
13:45 - 18:00	Social activity: Hike to Drachenfels
18:30 - 22:00	Workshop dinner

- **Thursday, February 5**

09:00 - 10:00	Elisabeth Ullmann <i>Uncertainty quantification analysis of bifurcations of the Allen-Cahn equation with random coefficients</i>
10:00 - 10:45	<i>Coffee break</i>
10:45 - 11:45	Elisa Iacomini <i>Investigating Uncertainty in Traffic Flow Modeling: Multi-Level Monte Carlo and Multi-Fidelity Approaches</i>
11:45 - 14:30	<i>Lunch break</i>
14:30 - 15:30	Free discussion time
15:30 - 16:15	<i>Coffee break</i>
16:15 - 17:15	Niklas Baumgarten <i>Distributed Multilevel Sequential Monte Carlo applied to PDE-based Bayesian Inverse Problems</i>

- **Friday, February 6**

09:00 - 10:00	Maarten Volkaerts <i>MCMC for Bayesian inference of the non-conducting region in intra-atrial reentrant tachycardia</i>
10:00 - 10:45	<i>Coffee break</i>
10:45 - 11:45	Emil Løvbak <i>Multilevel Monte Carlo simulation of diffusively scaled kinetic equations</i>
11:45 - 12:00	<i>Closing remarks</i>