

Winter School
**“Bridging multiscale, limited information, and low regularity in
computational mathematics”**

January 19 - 23, 2026

organized by
Steffen W. R. Werner, Emil Løvbak, Christian Döding, and Moritz Hauck

Time measurement: CET

• **Monday, January 19**

08:30 - 09:00	<i>Arrival and Registration</i>
09:00 - 09:05	<i>Welcome by HIM Director Stefan Müller</i>
09:05 - 10:00	Robert Scheichl <i>An Introduction to Multiscale Methods and Localised Model Reduction (Part I)</i>
10:00 - 10:30	<i>Coffee break</i>
10:30 - 12:00	Robert Scheichl <i>An Introduction to Multiscale Methods and Localised Model Reduction (Part II)</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 15:30	Catherine Powell <i>Parametric PDEs: Numerical Methods for Forward UQ & Surrogate Modelling (Part I)</i>
15:30 - 16:00	<i>Coffee break</i>
16:00 - 17:30	Catherine Powell <i>Parametric PDEs: Numerical Methods for Forward UQ & Surrogate Modelling (Part II)</i>
after 17:30	<i>Get-Together</i>

• **Tuesday, January 20**

09:00 - 10:00	Robert Scheichl <i>An Introduction to Multiscale Methods and Localised Model Reduction (Part III)</i>
10:00 - 10:30	<i>Group Photo and Coffee break</i>
10:30 - 12:00	Robert Scheichl <i>An Introduction to Multiscale Methods and Localised Model Reduction (Part IV)</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 15:30	Catherine Powell <i>Parametric PDEs: Numerical Methods for Forward UQ & Surrogate Modelling (Part III)</i>
15:30 - 16:00	<i>Coffee break</i>
16:00 - 17:30	Catherine Powell <i>Parametric PDEs: Numerical Methods for Forward UQ & Surrogate Modelling (Part IV)</i>

- **Wednesday, January 21**

09:00 - 10:00	Fabio Nobile <i>Multilevel Monte Carlo methods for random differential equations (Part I)</i>
10:00 - 10:30	<i>Coffee break</i>
10:30 - 12:00	Fabio Nobile <i>Multilevel Monte Carlo methods for random differential equations (Part II)</i>
12:00 - 14:00	<i>Lunch break</i>
14:00 - 15:30	Daniel Peterseim <i>An Introduction to Quantum Algorithms for Multiscale PDEs (Part I)</i>
15:30 - 16:00	<i>Coffee break</i>
16:00 - 17:30	Daniel Peterseim <i>An Introduction to Quantum Algorithms for Multiscale PDEs (Part II)</i>

- **Thursday, January 22**

09:00 - 10:00	Fabio Nobile <i>Multilevel Monte Carlo methods for random differential equations (Part III)</i>
10:00 - 10:30	<i>Coffee break</i>
10:30 - 12:00	Fabio Nobile <i>Multilevel Monte Carlo methods for random differential equations (Part IV)</i>
12:00 - 14:00	<i>Lunch break</i>
after 14:00	<i>Social event with Dinner</i>

- **Friday, January 23**

09:00 - 10:00	Daniel Peterseim <i>An Introduction to Quantum Algorithms for Multiscale PDEs (Part III)</i>
10:00 - 10:30	<i>Coffee break</i>
10:30 - 11:30	Daniel Peterseim <i>An Introduction to Quantum Algorithms for Multiscale PDEs (Part IV)</i>
11:30 - 13:30	<i>Lunch break</i>
13:30 - 14:30	Daniel Peterseim <i>An Introduction to Quantum Algorithms for Multiscale PDEs (Part V)</i>
14:30 - 15:00	<i>Closing Remarks from the Organizers</i>