



Conference schedule
New trends in numerical multiscale methods and beyond
July 12 - 16, 2021

Monday, July 12

10:00-10:30	Opening
10:30-11:15	Daniel Peterseim: <i>Super-localization of elliptic multiscale problems</i>
11:15-12:00	Free for discussions
13:30-14:15	Lei Zhang: <i>Adaptive Multiscale Coupling Methods for Crystalline Defects</i>
14:15-15:30	Free for discussions
15:30-16:15	Bin Dong: <i>Learning to Solve Forward and Inverse Problems in Imaging and Scientific Computing</i>
16:15-16:45	Coffee break
16:45-17:15	Felix Schindler: <i>On using reduced order models in data-augmented training of machine learning models for reactive flow</i>
17:15-18:00	Coffee break and discussions
18:00-18:45	Houman Owhadi: <i>On solving/learning differential equations with kernels</i>

Tuesday, July 13

09:00-09:45	Eric Chung: <i>Space-time NLMC for parabolic equations with moving channelized media</i>
09:45-11:00	Coffee break and discussions
11:00-11:45	Barbara Verfürth: <i>Offline-Online strategy for multiscale problems with random defects</i>
13:30-15:30	Free for discussions
15:30-16:00	Axel Målqvist: <i>Numerical homogenization for network models</i>
16:00-16:30	Coffee break and discussions
16:30-17:15	Anders Szepessy: <i>Canonical mean-field molecular dynamics derived from quantum mechanics</i>
17:15-18:00	Break and discussions
18:00-18:45	Mitchell Luskin: <i>Multiscale methods for mechanics, electronic structure, and transport in 2D heterostructures</i>

Wednesday, July 14

09:30-10:15	Doghonay Arjmand
10:15-12:00	Free for discussions
13:30-16:45	Free for discussions
16:45-17:30	Frédéric Legoll: <i>On the construction of coarse approximations for highly oscillatory elliptic problems by using coupling approaches</i>
17:30-18:00	Break and discussions
18:00-18:45	Greg Pavliotis

Thursday, July 15

09:00-09:45	Weizhu Bao: <i>Multiscale methods and analysis for the highly oscillatory nonlinear Klein-Gordon equation</i> Coffee
09:45-11:00	break and discussions
11:00-11:45	Johan Wärnegård: <i>Superconvergent discretizations for the Gross-Pitaevskii equation using the method of LOD</i>
13:30-15:30	Free for discussions
15:30-16:00	Robert Altmann: <i>A multiscale method for heterogeneous bulk-surface coupling</i>
16:00-16:30	Coffee break and discussions
16:30-17:15	Kathrin Smetana: <i>Randomized multiscale methods for nonlinear PDEs</i>
17:15-18:00	Break and discussions
18:00-18:45	Canceled: Matthew Jacobs

Friday, July 16

09:00-09:30	Roland Maier: <i>A high-order approach to elliptic multiscale problems</i>
09:30-10:00	Coffee break and discussions
10:00-10:30	Tim Keil: <i>Two-scale Reduced Basis Method for Parameterized Multiscale Problems</i>
10:30	Closing