

New Mathematics for the Exascale: Applications to Materials Science Tutorials

Tuesday March 14, 2023

- 8:00–8:55 *Check-in/Breakfast (hosted by IPAM)*
- 8:55–9:00 *Welcome & Opening Remarks: Dean Miguel García-Garibay (Dean of Physical Sciences, UCLA) and Dima Shlyakhtenko (Director, IPAM)*
- 9:00–10:15 **Vikram Gavini** (University of Michigan)
DFT 1
- 10:15–10:45 *Break*
- 10:45–12:00 **Tim Germann** (Los Alamos National Laboratory)
Molecular Dynamics 1
- 12:00–12:30 *Core Orientation with IPAM Staff*
- 12:30–2:00 *Lunch (on your own)*
- 2:00–3:15 **Johannes Blaschke** (Lawrence Berkeley Laboratory)
Complex Workflows 1
- 3:15–3:45 *Break*
- 3:45–5:00 **Erik Draeger** (Lawrence Livermore National Laboratory)
Future Exascale Architectures

Wednesday March 15, 2023

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:15 **Vikram Gavini** (University of Michigan)
DFT 2
- 10:15–10:45 *Break*
- 10:45–12:00 **Bjoern Enders** (Lawrence Berkeley Laboratory)
Complex Workflows 2
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:15 **Tzanio Kolev** (Lawrence Livermore National Laboratory)
Meso and Macroscale Modeling 1
- 3:15–3:45 *Break*
- 3:45–5:00 **Elaine Raybourn** (Sandia National Laboratories)
Sociological Aspects



Thursday March 16, 2023

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:15 **Tzanio Kolev** (Lawrence Livermore National Laboratory)
Meso and Macroscale Modeling 2
- 10:15–10:45 *Break*
- 10:45–12:00 **Evan Weinberg** (Nvidia Corporation)
Virtual Talk: Acceleration techniques
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:15 **Danny Perez** (Los Alamos National Laboratory)
Molecular Dynamics 2
- 3:15–3:45 *Break*
- 3:45–5:00 **Rahul Gayatri** (Lawrence Berkeley Laboratory)
Intro to NERSC and Performance Analysis Tools 1

Friday March 17, 2023

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:15 **Thomas Hudson** (University of Warwick)
Virtual Talk: Multiscale Modeling
- 10:15–10:45 *Break*
- 10:45–12:00 **Jack Deslippe** (Lawrence Berkeley Laboratory)
Title not available

