Computational Materials Science Summer School
11th Anniversary
College Station, Texas, USA
July 11 - 22, 2022

Program Schedule

Sunday – July 10, 2022
5:00 PM – Meet & Greet
In-Person in Room # 202, Reed McDonald Building, 575 Ross Street
Texas A&M University, College Station, TX 77843
Online on Zoom
*We will have pizza for the in-person event.

Class and instructional labs will be held in the
Innovative Learning Classroom Building (ILCB)*, Room 237
**215 Lamar St, College Station, TX 77844*

Module 1 – Atomistic

Monday – July 11, 2022 (Alloy Theory)
7:30AM – Breakfast
8:30 AM – Introduction to the 2022 Summer School
9:00 AM – Anton Van Der Ven, Univ. of California, Santa Barbara (USA)
10:30 AM – Break
10:45 AM – Lecture - continued
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

Tuesday – July 12, 2022 (Atomistic simulations: the very good, the bad, and the ugly)
8:00 AM – Breakfast
9:00 AM – William Curtin, Ecole Polytechnique Federale de Lausanne, (Switzerland)
10:30 AM – Break

10:45 AM – Lecture - continued
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

Module 2 – Mesoscale

Wednesday – July 13, 2022 (Phase Field Modeling)
8:00 AM – Breakfast
9:00 AM – Michael Tonks, University of Florida (USA) – Remote Instructor
10:30 AM – Break
11:00 AM – Instructional Lab
1:00 PM – Lunch
2:00 PM – End of Day

Thursday – July 14, 2022 (Dislocation Dynamics)
9:30AM – Coffee & Snacks
10:30 AM – Sylvie Aubry, Lawrence Livermore National Lab (USA) – Remote Instructor
12:00 PM – Lunch
1:00 PM – Instructional Lab
3:00 PM – End of Day

Module 3 – *Continuum*

Friday – July 15, 2022 (FFT-based Homogenization)
8:00 AM – Breakfast
9:00 AM – Javier Segurado, Universidad Politécnica de Madrid (Spain) – Remote Instructor
10:30 AM – Break
11:00 AM – Instructional Lab
1:00 PM – Lunch
2:00 PM – End of Day

Saturday – July 16, 2021 - Weekend
Sunday – July 17, 2021 – Weekend

Monday – July 18, 2022 (Crystal Plasticity)
8:00 AM – Breakfast
9:00 AM – Shailendra Joshi, University of Houston (USA)
10:30 AM – Break

10:45 AM – Lecture - continued
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

Tuesday – July 19, 2022 (Cracks and Fracture)
8:00 AM – Breakfast
9:00 AM – Jacques Besson/Yazid Madi, MINES Paris Tech (France)
10:30 AM – Break
10:45 AM – Lecture - continued
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

Module 4 – Informatics

Wednesday – July 20, 2022 (Machine Learning Best Practices & Fundamentals for Materials Science)
8:00 AM – Breakfast
9:00 AM – Taylor Sparks, University of Utah (USA) – Remote Instructor
10:30 AM – Break
11:00 AM – Instructional Lab
1:00 PM – Lunch
2:00 PM – End of Day

Thursday – July 21, 2022 (Machine Learning Assisted Alloy Design)
8:00 AM – Breakfast
9:00 AM – Dongwon Shin, Oak Ridge National Laboratory (USA)
10:30 AM – Break
10:45 AM – Lecture – continued……
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

Friday – July 22, 2022 (Alloy Design)
8:00 AM – Breakfast
8:30 AM – Pedro Rivera-Diaz, Lancaster University (UK)
10:30 AM – Break

10:45 AM – Lecture - continued
12:45 PM – Lunch
2:00 PM – Instructional Lab
3:30 PM – Break
3:45 PM – Instructional Lab – continued
5:00 PM – End of Day

6:00 PM – Closing Ceremony
Location to be determined