

Computational Materials Science Summer School (CMS³)

12th Anniversary

In-person on Texas A&M campus in College Station, TX, USA & Remotely online

July 23 – August 4, 2023

Program Schedule

*All listed times are in Central Daylight Time (Texas local time)

Sunday | July 23, 2023 | Welcome

5:00 PM

Meet & Greet over Pizza RDMC 202, 575 Ross Street, College Station, TX 77843 & Online via Zoom**

In-person class and instructional labs will be held in the Innovative Learning Classroom Building (ILCB)*, Room 237 *215 Lamar St, College Station, TX 77843 & Online via Zoom**

**Zoom Link: <u>https://tamu.zoom.us/s/96785841829</u> Meeting ID: 967 8584 1829 Passcode: CMS3

Module 1 – Atomistic

Monday | July 24, 2023 | Alloy Theory

8:00 AM	Breakfast
8:30	Introduction to the 2023 Summer School
9:00	Anton Van Der Ven, Univ. of California, Santa Barbara, US
	& Brian Puchala
10:30	Break
10:45	Lecture – continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned



Tuesday | July 25, 2023 | Atomistic simulations: the very good, the bad, and the

ugly	
8:30 AM	Breakfast
9:00	William Curtin, Brown University, US & Xin Liu
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned

Module 2 – Mesoscale

Wednesday | July 26, 2023 | FFT-based Homogenization

Spain

Thursday | July 27, 2023 | Dislocation Dynamics

8:30 AM	Breakfast
9:00	Nicolas Bertin, Lawrence Livermore National Lab, US
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned







Friday | July 28, 2023 | Crystal Plasticity

8:30 AM	Breakfast
9:00	Shailendra Joshi, University of Houston, US
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned
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Saturday | July 29, 2023 | Weekend

Sunday | July 30, 2023 | Weekend

Module 3 – Continuum

Monday | July 31, 2023 | Phase Field Modeling

8:30 AM	Breakfast
9:00	Michael Tonks, University of Florida, US
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned

Tuesday | August 1, 2023 | Cracks and Fracture

8:30 AM	Breakfast
9:00	Amine Benzerga, Texas A&M University
	Yazid Madi & Jean-Michel Scherer, MINES ParisTech, France
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned





Module 4 – Informatics

Wednesday | August 2, 2023 | Machine Learning Best Practices & Fundamentals for Materials Science

8:30 AM	Breakfast
9:00	Taylor Sparks, University of Utah, US – Virtual Instructor
10:30	Break
11:00	Instructional Lab
1:00 PM	Lunch
2:00	Adjourned

Thursday | August 3, 2023 | Machine Learning Assisted Alloy Design

8:30 AM	Breakfast
9:00	Dongwon Shin, Oak Ridge National Laboratory, US
10:30	Break
10:45	Lecture – continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned

Friday | August 4, 2023 | Alloy Design

8:00 AM	Breakfast
8:30	Pedro Rivera-Diaz, Lancaster University, UK
10:30	Break
10:45	Lecture - continued
12:45 PM	Lunch
2:00	Instructional Lab
3:30	Break
3:45	Instructional Lab – continued
5:00	Adjourned

6:00 PM Closing Dinner & Certificate Ceremony Location to be determined