

Summer School 2023

Simulation of van der Waals [hetero]structures

Technische Universität Dresden, August 29 - 31, 2023

Event Locations

Hotel: IntercityHotel Dresden ([Wiener Platz 8, 01069 Dresden](#))

Tutorial talks: CHE/184 ([Chemistry Building, Bergstraße 66, 01069 Dresden](#))

Hands-on sessions: HSZ/203 ([Central Lecture Halls, Bergstraße 64, 01069 Dresden](#))

Lunch breaks: Alte Mensa ([Old Canteen](#))

Monday, August 28, 2023

18:00 Registration in the hotel lobby (or on Tuesday morning during the first session)

19:00 Welcome dinner at Ramen 1974 ([Prager Straße 7, 01069 Dresden](#))

Tuesday, August 29, 2023

10:00 An introduction to simulations in physics and chemistry (Prof. Thomas Heine, TU Dresden)

10:30 Geometry optimization in 2D materials (Dr. Rico Friedrich, TU Dresden)

11:45 Coffee break

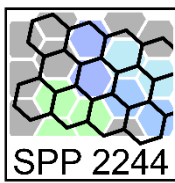
12:00 Force fields – Concepts, applications, and parametrization (Prof. Gabriel Bester, Uni Hamburg)

13:15 Lunch break

14:15 Introduction to the Amsterdam Modelling Suite (M.Sc. Florian Arnold, TU Dresden)

14:30 Hands-On session

17:30 Poster session (foyer of chemistry building CHE)



Wednesday, August 30, 2023

- 9:30** Basics of electronic structure calculations (Dr. Paulo E. Faria Junior, Uni Regensburg)
- 10:15** Coffee break
- 10:30** Density functional theory – Introduction (Dr. Paulo E. Faria Junior, Uni Regensburg)
- 11:15** Coffee break
- 11:30** Density functional theory – How to set up a calculation? (Dr. Thomas Brumme, TU Dresden)
- 13:00** Lunch break
- 14:00** Hands-on session
- 18:00** Dinner at El Rodizio ([Wilsdruffer Straße 22, 01067 Dresden](#))

Thursday, August 31, 2023

- 9:30** Magnetic 2D materials (Dr. Thomas Brumme, TU Dresden)
- 10:00** Modelling of transport properties in 2D materials (M.Sc. Alireza Ghasemifard, TU Dresden)
- 10:30** Coffee break
- 10:45** Simulation of Raman spectra (Dr. Agnieszka Kuc, HZDR)
- 11:15** Moiré materials – Structure and superlattice effects (M.Sc. Florian Arnold, TU Dresden)
- 12:00** Lunch break
- 13:00** Hands-on session

Free evening (If you want suggestions of where to go in town, talk to the lab assistants.)

Friday, September 1, 2023

Departure (Please check out of the hotel until 12:00.)