Machine-Learning in Quantum and Nonadiabatic Dynamics



(Credit: Mohammad Shakiba & ChatGPT)

https://quantum-dynamics-hub.github.io/MolSSI_workshop2024/

University at Buffalo, SUNY, Aug 15-16, 2024

Objectives of this Workshop









Daniel Crawford - director of MolSSI

Objectives:

- Awareness: learn about the new/best practices of using ML in electronic structure, quantum dynamics, and related simulations
- Interdisciplinary cross-pollination: focus on different closely- or more distantly-related fields look for common usages, know-hows, and potential problems; share and discuss ideas; educate each other;
- Software motivation!!!: learn about practical aspects (codes, software, tutorials) of such calculations one of MolSSI's mission. Try to be practical.

Working Plan



Hybrid format: in-person + Zoom

Join Slack:

https://join.slack.com/t/quantumdynamicshub/shared_invite/zt-mjbhjssx-

GGhsbYHxeBMvhmumK_j7LA

Please provide your input:

Google Docs:

https://docs.google.com/document/d/1D8pYIUbMmg3Nx45jb6nTULSxjGsXQsdsf0jxeMc07t Y/edit?usp=sharing

Slack: https://join.slack.com/t/quantumdynamicshub/shared_invite/zt-mjbhjssx-GGhsbYHxeBMvhmumK_j7LA

* Please use the #molssi-2024 channel

WeChat: ???

Work in small groups in the breaks - also remote participants

The summary of the working documents will be made available on the Website

Lectures will be videorecorded, abstracts and presentations will be made available via the Website

Organizers and Helpers





Alexey Akimov



Mohammad Shakiba



Daeho Han



Qingxin Zhang

Daily Schedule

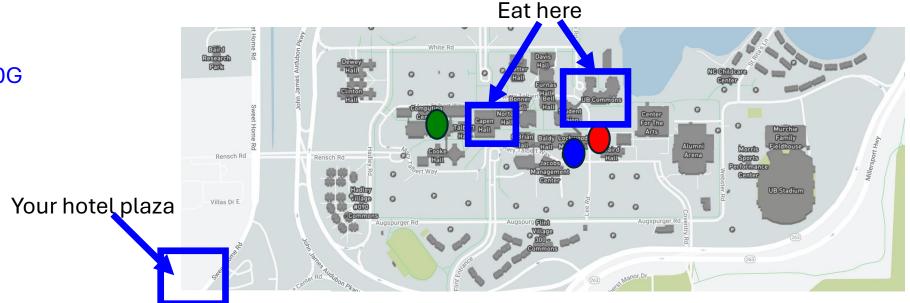


Daily

- Breakfast = hotel
- 9:00 am 12:00 pm: Morning session (Recording)
- 12:00 1:30 pm Working lunch/rest on your own at "Commons" or "World Cafe", rest, discuss, collaborate
- 1:30 pm 5:00 pm: Afternoon session (Recording)
- After 5:00 pm: collaborations/on your own, dinner on your own

Location

- Aug. 15 Baldy Hall 200G
- Aug. 16– Clemens 120



Campus Map: https://www.buffalo.edu/home/visiting-ub/map.html