ACS Spring 2023 Workshop on

"Quantum Information and Quantum Computing for Chemistry"

Saturday

Saturday Lunch & Learn Workshops: QuSTEAM: Introduction to Quantum Computing

09:00am - 05:00pm USA / Canada - Eastern - March 25, 2023 | Location: Marriott Ballroom 6 (Indianapolis Marriott Downtown)

Session Type: General Workshops - In-person

In this workshop, we will give a general introduction to quantum information and quantum computing focusing on the development in the field of quantum chemistry. Then will present lectures on quantum computing methods for electronic structure and open quantum dynamics. Finally, we will have a practical session, hands on solving quantum chemistry problems on the current quantum devices.

9:00-10:00 am: *Sabre Kais*, Chemistry Department, Purdue University, "The Second Quantum Revolution: Introduction to Quantum Information and Quantum Computing".

10:00-11:00 am: *Sabre Kais,* Chemistry Department, Purdue University, "Introduction to Quantum Information and Quantum Computing for Chemistry".

11:00- 12:00 am: *Zixuan Hu,* Chemistry Department, Purdue University, "Quantum Computing Algorithms for Open Quantum Dynamics".

Lunch

1:30-2:30 pm: *Manas Sajjan*, Chemistry Department, Purdue University, "Quantum Machine Learning and Implementation on Quantum Devices".

2:30-4:00 pm: *Sumit Kale and Rishabh Gupta*, Chemistry Department, Purdue University, "Hands on Solving Quantum Simulation Problems on Quantum Devices"



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ACS Spring 2023 Online Registration is Required: https://www.xpressreg.net/register/acsa0323/start.asp