

Quantum Winter School 2026: Quantum Simulation

Wednesday January 21, 2026

- 8:00–8:55 *Check-In/Breakfast (Hosted by IPAM)*
- 8:55–9:00 *Welcome and Opening Remarks*
- 9:00–12:30 **Kenneth Brown** (Duke University)
Tutorial Introduction to Quantum Simulation (Part 1)
- 9:00–12:30 **Kenneth Brown** (Duke University)
Tutorial Introduction to Quantum Simulation (Part 2)
- 12:30–12:35 *Group Photo*
- 12:35–2:00 *Lunch (on your own)*
- 2:00–5:30 **Xiaodi Wu** (University of Maryland)
Hamiltonian-oriented Quantum Algorithm Design and Implementation (Part 1)
- 2:00–5:30 **Xiaodi Wu** (University of Maryland)
Hamiltonian-oriented Quantum Algorithm Design and Implementation (Part 2)
- 5:30–7:00 *Poster Session and Dinner (Hosted by IPAM and Physics & Astronomy)*

Thursday January 22, 2026

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–12:30 **Zohreh Davoudi** (University of Maryland)
Quantum Simulation for Quantum Field Theories (Part 1)
- 9:00–12:30 **Zohreh Davoudi** (University of Maryland)
Quantum Simulation for Quantum Field Theories (Part 2)
- 12:30–2:00 *Lunch (on your own)*
- 2:00–5:30 **Andreas Weichselbaum** (Brookhaven National Laboratory)
Tensor Networks and Applications to Many-body Systems (Part 1)
- 2:00–5:30 **Andreas Weichselbaum** (Brookhaven National Laboratory)
Tensor Networks and Applications to Many-body Systems (Part 2)



Friday January 23, 2026

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–12:30 **Victor Batista** (Yale University)
Quantum Simulation for Chemistry and Materials Science (Part 1)
- 9:00–12:30 **Victor Batista** (Yale University)
Quantum Simulation for Chemistry and Materials Science (Part 2)
- 12:30–12:35 *Closing Remarks*

