## Analog quantum simulation (2:30-3:45)

In this breakout session, we will discuss the role analog quantum simulation could play in a quantum testbed. The session will begin with a few brief presentations that lead into a discussion of the following questions:

- What technologies are available for analog quantum simulation and to what extent do these overlap with technology for digital quantum simulation? Can and should a system support both gate- and Hamiltonian-based computation?
- Are there scientific applications to which analog simulation is particularly well-suited?
- What verification and validation techniques are available for analog simulation?

## Speakers:

- 1. Dan Stamper-Kurn, Lawrence Berkeley National Lab Large-scale Simulation with Ultracold Atoms and Molecules
- 2. Joel Moore, Lawrence Berkeley National Lab Connecting Finite Quantum Networks to Extended Quantum Materials
- 3. Alex Sergienko, Boston University Quantum Simulation of Complex Discrete Hamiltonians

Session Chair: Jonathan Carter