Superconducting qubits (2:30-3:45)

In this breakout session, we will discuss superconducting qubits as a potential technological foundation for a quantum testbed. The session will begin with a few brief presentations that lead into a discussion of the following questions:

- What is the scaling potential for quantum computing devices based on superconducting qubits? What factors limit scalability?
- What enabling technology will be important for advancing quantum computing with superconducting qubits? Please be specific.
- What are the advantages and disadvantages of superconducting qubits for a quantum testbed?
- What computing model, size, performance, and qubit connectivity are of value for a trapped ion testbed?
- Are there scientific applications to which superconducting qubits are particularly well or poorly suited?

Speakers:

1. Irfan Siddiqi, Lawrence Berkeley National Lab
   Scaling up Multi-qubit Circuits for Quantum Simulation
2. Will Oliver, MIT/Lincoln Lab
   Superconducting Qubit Testbed Facility

Session Chair: Peter Maunz