## Trapped ion qubits (4:00-5:15)

In this breakout session, we will discuss trapped ions 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 trapped ions? What factors limit scalability?
- What enabling technology will be important for advancing quantum computing with trapped ions? Please be specific.
- What are the advantages and disadvantages of trapped ions 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 trapped ions are particularly well or poorly suited?

## Speakers:

- Thomas Monz, Innsbruck Technical Considerations for an Ion-trap-based Quantum Testbed
- 2. Jeremy Sage, MIT/Lincoln Lab Technologies for a Robust, Scalable Trapped-ion Quantum Testbed
- Matthew Blain, Sandia National Lab Micro-fabricated Ion Traps for Scalable Quantum Information Processing

Session Chair: Peter Maunz