

### **Models for system design and testing (2:30-3:45)**

In this breakout session, we will discuss software tools for designing and evaluating the performance of quantum computing hardware. The session will begin with a few brief presentations that lead into a discussion of the following questions:

- What software tools exist for design and evaluation of systems of qubits, quantum simulation algorithms, etc.? What are the inherent limitations of these tools? What problems are they well-suited to address and what problems can only be explored with hardware?
- To what extent are tools and techniques for design and evaluation of early-stage classical computing technology applicable to quantum computing?

Speakers:

1. Adam Meier, GTRI  
Testbed Modeling and Validation
2. Anastasiia Butko, Lawrence Berkeley National Lab  
Towards Scalable Quantum Architecture Simulation
3. Adolphy Hoisie, Pacific Northwest National Lab  
The CENATE Approach to Testbeds

Session Chair: Robin Blume-Kohout