Hardware Characterization

Single Qubit Routines

Gate Set Characterization

- Standard Randomized Benchmarking

Low Level Characterization

- Resonator Characterization
  - Resonator Spectroscopy
  - Resonator Punchout
  - Resonator Flux Dependence
  - Resonator Crosstalk
- Readout Optimization
- Qubit Characterization
  - Qubit Spectroscopy
  - Qubit EF Spectroscopy
  - Qubit Flux Dependence
  - Qubit Crosstalk
  - Qubit flux tracking
- T1 & T2
- Couplers
  - Qubit spectroscopy
  - Resonator Spectroscopy
- Zeno
- Single-Shot Classification
- Rabi
  - Amplitude
  - Length
  - EF Transition
- AllXY & Drag Pulse Tuning
- Ramsey
  - Standard
  - Detuned
- Flipping
- Dispersive Shift
- Readout Characterization
  - Fidelity
  - QND-ness
  - Mitigation matrix
- TWPA Optimization
- Fast Reset Test
- Time of Flight Readout
- Qutrit classification
- Avoided crossing

Two Qubits Interactions

- Chevron
- Tune Landscape
- CHSH