Research Interests

Here are some of the topics that we work on.

Quantum Thermodynamics

- Heat-bath algorithmic cooling
- Resource theory of non-uniformity

Physical Implementation platforms for Quantum technologies

- Spin Quantum Systems
- Superconducting qubits
- Quantum Optics

Quantum Foundations

- Contextuality
- Macroscopic Quantum effects
- Resource theories

Machine Learning

- Applications of ML in physics
- Quantum algorithms for ML