

The Stewart Blusson Quantum Matter Institute at UBC is seeking highly motivated candidates to become part of the team working on the Grand Challenge project *Pushing the Boundaries of Noisy Intermediate Scale Quantum (NISQ) Computing by Focusing on Quantum Materials Problems*.

About the project

Quantum computers with a restricted number of qubits have recently been demonstrated in several laboratories. Owing to the unusual properties of quantum algorithms, even a small number of qubits may be sufficient to obtain meaningful computational results. The goal of this research program is to demonstrate that existing and near-term (5-8 years) quantum computing (QC) technologies can be used to generate meaningful computational results of scientific and/or commercial value that cannot be efficiently obtained through classical computation alone. It will approach this through research in applications in condensed matter and Quantum materials problems, the main strengths of our institute.

The research team is led by Robert Raussendorf and includes principal investigators Mona Berciu, Joe Salfi, Roman Krems, Ian Affleck, Sarah Burke, Lukas Chrostowski, Josh Folk, Marcel Franz, Jeff Young and Eran Sela.

We are seeking motivated candidates for a **Research Associate** position and a **Postdoctoral fellowship** position. Candidates of interest must be skilled in quantum algorithms and NISQ-era machines programming. Themes of interest for research involve, but are not limited to:

- Quantum and hybrid quantum-classical algorithms
- Quantum hardware benchmarking
- Algebraic methods in quantum computing

Access <https://qmi.ubc.ca/employment> and contact Prof. Raussendorf at raussen@phas.ubc.ca for application.

POSTDOCTORAL FELLOWSHIP AND RESEARCH ASSOCIATE POSITIONS OPEN IN NISQ-ERA QUANTUM COMPUTING