

The Department of Physics within the Faculty of Science at Simon Fraser University (SFU) invites applications for a full-time tenure-track faculty position at the rank of Assistant Professor in Theoretical Quantum Information Technology, to work closely with experimentalists on realizing practical quantum networks. The expected start date is July 15, 2025. We seek an outstanding scholar with a strong commitment to excellence in research, teaching, and service.

The Department of Physics at SFU has an outstanding and growing program in quantum information and related fields and close ties to British Columbia's thriving quantum technology industry. We seek candidates whose research and teaching interests complement and enhance our existing departmental strengths, and who can collaborate closely with SFU's recently hired Canada Excellence Research Chair Professor Thomas Jennewein.

The successful candidate is expected to: develop a successful research program that is internationally recognized; teach effectively in Physics at the undergraduate and graduate levels; supervise and mentor graduate students; and contribute to building equitable, diverse and inclusive environments. We invite applications from theorists with research interests in quantum internet protocols and applications. Areas of interest include but are not limited to: developing applications that leverage the quantum properties of light such as communications, computing, networks and imaging and/or advancing their implementations with quantum optical platforms (photonic devices, circuits, and systems).

This position offers opportunities for candidates to develop partnerships between academia, industry and government research labs to support the Canadian national quantum ecosystem.

Qualifications

Excellence in research and teaching are the primary criteria for this position. The successful candidate must hold a PhD in Physics, Electrical and Computer Engineering, Computer Science or a closely related field by the employment start date. Furthermore, they must demonstrate:

- An outstanding research record relative to career stage as potentially demonstrated by publications and/or patents, research presentations, and other relevant accomplishments in the area of theoretical quantum information technology.
- Future research plans with scientific potential that complement and strengthen existing research at SFU.
- Interest and ability to realize excellence in teaching (across a range of Physics courses) and supervision of students.
- A commitment to fostering an inclusive and equitable environment for students, faculty, and staff.

How To Apply

Candidates should address their applications to the Search Committee Chair, Professor Malcolm Kennett. The application itself should be submitted as a single PDF, emailed to the Physics Chair's Assistant at physchairsec@sfu.ca, containing:

- A concise (1-2 page) cover letter providing: 1) your reasons for applying for the position, and 2) a narrative description highlighting how you meet the job qualifications and would effectively fulfill job expectations.
- A complete up-to-date curriculum vitae that lists your education and employment history, publications and conference presentations, funding and awards, student supervision, collaborations/partnerships, teaching experience, and service contributions.

- A research statement (3-5 pages) describing your past research contributions, broad future goals, and five-year research plan.
- Three examples of peer-reviewed published scholarly work.
- A statement (maximum 2 pages) describing your philosophy and experience of teaching and mentoring.
- A statement (maximum 2 pages) describing past and desired future contributions to enhancing equity, diversity, and inclusion within research, teaching, and service.
- Please indicate your legal status to work in Canada.

Candidates should arrange for three letters of reference to be sent to physchairsec@sfu.ca from referees who can comment on your research, and, if possible, teaching capabilities and service.

Candidates are encouraged to highlight in their application how alternative career paths and/or career interruptions (e.g., parental leave, leave due to illness, research delays due to COVID-19) have impacted them; we commit to ensuring these are taken into careful consideration. We are committed to ensuring that the application and interview process is accessible to all applicants. If you require any assistance or accommodations, please contact the Equity Office at edi@sfu.ca.

Full consideration will be given to applications received by **January 2, 2025**. Applications received after this date may be reviewed if the position is still open. The anticipated start date is July 15, 2025.

Simon Fraser University respectfully acknowledges the x^wməθk^wəyəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), səliwətaʔ (Tsleil-Waututh), qíćəy (Katzie), k^wik^wəłəm (Kwkwetlem), Qayqayt, Kwantlen, Semiahmoo, and Tsawwassen peoples on whose unceded traditional territories our three campuses reside.

Simon Fraser University is an institution whose strength is based on our shared commitment to diversity, equity and inclusion. Diversity is an underlying principle of our Strategic Vision, which pledges SFU to “foster a culture of inclusion and mutual respect, celebrating the diversity reflected among its students, faculty, staff, and our community.” SFU is committed to ensuring no individual is denied access to employment opportunities for reasons unrelated to ability or qualifications. Consistent with this principle, SFU will advance the interests of underrepresented members of the work force, including Indigenous peoples, persons with disabilities, racialized persons and women; embrace gender and sexual diversity; ensure that equal opportunity is afforded to all who seek employment at the University; and treat all employees equitably. Candidates that belong to underrepresented groups are particularly encouraged to apply.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

Faculty salaries at SFU are based on the salary scales bargained between the University and the SFU Faculty Association. A reasonable estimate of the base salary range for this role at the Assistant Professor rank is \$104,700 - \$133,322 (dependent on experience). SFU also offers a comprehensive benefits package, including pension, health, and dental benefits. For details on the benefits offered by SFU, please visit the Faculty Relations website.

Personal information that forms part of an application is collected under the general authority of the Freedom of Information and Protection of Privacy Act, applicable University Policies, and the SFUFA/SFU Collective Agreement. For further details, see the full Collection Notice.