



**Tenure Track Faculty Position in Machine Learning for Mathematical & Quantum Physics
Department of Applied Mathematics (University of Waterloo) and Perimeter Institute for
Theoretical Physics**

The Department of Applied Mathematics at the University of Waterloo and the Perimeter Institute for Theoretical Physics invite applications for a tenure-track Assistant Professor position in the area of Machine Learning for Mathematical & Quantum Physics. In special cases a position at the rank of Associate or Full Professor may be considered.

The incumbent will be a faculty member in Applied Mathematics at the University of Waterloo and will spend 50% of their time as an Associate at the Perimeter Institute.

We are particularly interested in outstanding researchers with interests related to one or more of the following areas:

- machine learning for quantum physics / quantum computing
- quantum machine learning
- intersection of machine learning and quantum matter or condensed matter theory
- machine learning for other areas of mathematical / theoretical / computational physics
- researchers with broader interests at the intersection of machine learning and physics will also be considered

We are looking for applicants with an enthusiasm for teaching at both the undergraduate and graduate level, and for the supervision of graduate research. All complete applications received by January 15, 2024 will receive full consideration.

The Department of Applied Mathematics is one of four departments that, together with the School of Computer Science, comprise the Faculty of Mathematics at the University of Waterloo. With 300 faculty members, 8,000 undergraduate students and more than 1,000 graduate students in mathematics and computer science, Waterloo's Faculty of Mathematics is a global powerhouse in research, education and innovation. The Applied Mathematics department has 30 regular faculty members, over 100 graduate students, and strong undergraduate programs in applied mathematics, scientific computing and mathematical physics. Research in the department is enhanced by close links to interdisciplinary institutes including the Perimeter Institute, the Waterloo Artificial Intelligence Institute, the Centre for Computational Mathematics, and the Institute for Quantum Computing. More information about the department can be found at <https://uwaterloo.ca/applied-mathematics/>.

The Perimeter Institute is a leading global centre for fundamental research in theoretical physics. Home to more than 150 resident researchers and 1,000 visiting scientists each year all working to unlock nature's most profound secrets hidden deep inside the atom and far across the universe, Perimeter's research efforts include condensed matter theory, cosmology, mathematical physics, quantum fields and strings, quantum foundations, quantum gravity, quantum information, and particle physics. Visit www.perimeterinstitute.ca for more information and to view the list of Perimeter Institute researchers.

Interested candidates must have a PhD or equivalent in Applied Mathematics, Theoretical Physics or a related field. The salary range for this position is \$110,000-\$160,000 CAD. Salary will be commensurate with qualifications, experience, and research record. Negotiations beyond this salary range will be considered for exceptionally qualified candidates. The effective date of appointment is July 1, 2024. Interested individuals should apply using MathJobs (<https://www.mathjobs.org/jobs/list/24027>). Complete applications should include a cover letter, a curriculum vitae, research and teaching statements, a statement on Equity-Diversity-Inclusion, teaching evaluation summaries (if available) and up to three reprints/preprints. In addition, applicants should arrange to have at least three reference letters submitted on their behalf by January 15, 2024.

The University of Waterloo understands the impact that career interruptions (e.g. parental leave, leave due to illness) can have on a candidate's achievement and encourages potential candidates to explain in their application the impact this may have on their record; this information will be taken into careful consideration during the assessment process.

If you have any questions regarding the position, please contact: Prof. Hans De Sterck, Chair, Department of Applied Mathematics, University of Waterloo, Canada (hdesterck@uwaterloo.ca).

The University values the diverse and intersectional identities of its students, faculty, and staff. The University regards equity and diversity as an integral part of academic excellence and is committed to accessibility for all employees. The University of Waterloo seeks applicants who embrace our values of equity, anti-racism and inclusion. As such, we encourage applications from candidates who have been historically disadvantaged and marginalized, including applicants who identify as Indigenous peoples (e.g., First Nations, Métis, Inuit/Inuk), Black, racialized, a person with a disability, women and/or 2SLGBTQ+.

The University of Waterloo is committed to accessibility for persons with disabilities. If you have any questions regarding the application process, assessment process or eligibility requirements please contact Alicia Hanbidge (ahanbidg@uwaterloo.ca). At any time candidates can submit requests for application, interview or workplace accommodations to Alicia Hanbidge (ahanbidg@uwaterloo.ca).

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

Three Reasons to Apply: <https://uwaterloo.ca/faculty-association/why-waterloo>.

Why Choose Perimeter: <https://perimeterinstitute.ca/workplace-culture-perimeter-institute>.

The University of Waterloo acknowledges that much of our work takes place on the traditional territory of the Neutral, Anishinaabeg and Haudenosaunee peoples. Our main campus is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. Our active work toward reconciliation takes place across our campuses through research, learning, teaching, and community building, and is centralized within our [Indigenous Initiatives Office](https://uwaterloo.ca/human-rights-equity-inclusion/indigenousinitiatives) (<https://uwaterloo.ca/human-rights-equity-inclusion/indigenousinitiatives>).