Postdoctoral Fellowship in Quantum Condensed Matter Physics

Group of Prof. William Witczak-Krempa

We invite exceptional candidates to seize the opportunity for a **postdoctoral position** in the realm of theoretical Quantum Condensed Matter Physics within the **research group led by Professor William Witczak-Krempa** (Canada Research Chair in Quantum Phase Transitions). Join the group starting **September 1, 2024**, and become an integral part of our dynamic team. The appointment is for two (2) years. An extension to a 3rd year is possible.

Our research group delves into the theoretical aspects of quantum phases of matter, including quantum phase transitions, topological states, and unconventional superconductors. Additionally, we use novel methods that intersect with the field of quantum information to get new insights regarding highly entangled phases. Our approaches span the spectrum of cutting-edge field theory techniques (including Conformal Field Theory) to sophisticated numerical methods.

Collaborative Opportunity: This venture extends beyond the confines of our research group as we proudly collaborate with the newly created **Institut Courtois**. This collaboration opens avenues for using Artificial Intelligence to get deeper insights into quantum many-body physics. Learn more about the collaborative synergy at Institut Courtois.

Position Details:

- **Degree Level:** PhD in theoretical physics obtained within the last three (3) years with a strong background in quantum many-body physics, and previous research experience in theoretical condensed matter physics.
- **Commencement:** September 1, 2024.
- **Compensation:** Highly competitive salary offered.

For further insight into our research group and its endeavours, please visit: Condensed Matter Theoretical Physics

Application Process:

Interested candidates are requested to submit the following documents to soraya.saidj@umontreal.ca

- Detailed Curriculum Vitae, including a complete publication list

- Cover letter
- Research proposal (2 pages maximum)
- At least 2 letters of recommendation (to be sent directly by your referees)

Application deadline: Applications will be considered until **December 20, 2023.**

About Université de Montréal and the City:

Université de Montréal stands tall as one of Canada's premier research institutions, conveniently located within the vivacious and multicultural city of Montréal. Our Physics Department finds its home in the modern science campus, the MIL, established in 2019. The department actively participates in the strategic cluster RQMP, dedicated to advancing the discovery and study of avant-garde materials. The cluster is a collaborative endeavour involving neighbouring institutions such as McGill University and Université de Sherbrooke.
Elevate your academic journey by embracing this unique opportunity at the crossroads of Quantum Condensed Matter Physics and collaborative exploration. We look forward to receiving your applications and welcoming you to our engaging academic community.

Campus MIL: the new science campus was built in 2019. This modern complex is located in the heart of the city.

The Université de Montréal is committed to employment equity and diversity and encourages applications from all qualified candidates, including women, people of any sexual orientation, gender identity, or gender expression; Indigenous peoples; visible minorities and racialized people; and people with disabilities.