Fully Funded PhD/MSc Positions in Semiconductor Quantum Optoelectronics at the Centre for Optics, Photonics and Lasers (COPL), Université Laval, Quebec, Canada

We have immediate openings for fully funded PhD and MSc students in semiconductor quantum optoelectronics at the Centre for Optics, Photonics and Lasers (COPL), Université Laval, a world-class research center in optics and photonics.

Key research Areas

- Mid-IR Optoelectronics: Quantum cascade devices, high-power lasers, sensors, detectors;
- Quantum Dot Physics: Laser dynamics, squeezed light, frequency combs;
- Silicon Photonics: Ring lasers, integrated photonic circuits, nonlinear optics;
- Classical & Quantum communications, free-space optics.

Candidate Profile

We seek highly motivated candidates with a strong background in optics, photonics, or electrical engineering. If you are interested in joining our team, please send your CV to Prof. Frédéric Grillot at frederic.grillot@phy.ulaval.ca. Collaborations with the University of California Santa Barbara and the University of New-Mexico may be also considered in some projects.

About the Research Group

Prof. Frédéric Grillot is an incoming professor at Université Laval. His research group focuses on developing cutting-edge quantum photonics technologies. His group is committed to producing breakthrough innovations, developing proof-of-concept demonstrations, and creating next-generation quantum devices.

Our work spans:

- Modeling & simulation of advanced quantum device structures;
- Theoretical analysis & performance evaluation;
- Integration into subsystems & test-bed environments.

We also actively collaborate with industry leaders and contribute to a wide range of fields, including optical communications, quantum technologies, sensing, defense, and security.

About Université Laval (UL)

Founded in 1663, Université Laval is one of Canada's leading research institutions, ranked 7th among Canada's Top 50 Research Universities and home to four Canada Excellence Research Chairs. Located in Québec City, a hub for optics and photonics innovation, UL is a member of the U15 Group of Canadian Research Universities and closely collaborates with 52 companies in the local optics-photonics industry, including the National Optics Institute (INO). Join us and contribute to shaping the future of quantum optoelectronics.

Recent references are available here: https://perso.telecom-paristech.fr/grillot/annual.html