

## PhD positions in mathematics

Two PhD positions in mathematics, based jointly in Paris and Montreal, will be opened with a starting date prior to October 2020. Successful candidates should have excellent records for their bachelor and master studies and should show a strong scientific potential.

### What are the research fields

Proposed research directions lie on the interface between mathematical physics, partial differential equations and probability theory. They include (but are not limited to) the following subjects:

- Entropy production in deterministic and stochastic systems (classical or quantum)
- Repeated quantum measurements
- Control for PDEs and its applications

### How it works

The PhD candidates will be registered at [Paris–Seine University](#) and [McGill University under a cotutelle agreement](#). Successful candidates will be expected to spend approximately half of their time in Paris and the other half in Montreal. They will prepare a single thesis under joint supervision (in Paris by either Armen Shirikyan or Laurent Bruneau, depending on the research direction, and in Montreal by Vo-jkan Jakšić), and in the end they will receive a PhD degree jointly awarded by the two universities. To that end, the students will need to meet the *academic requirements of both universities*.

### Who is eligible to apply

Positions are open to all nationalities, even though possessing French or Canadian nationality opens up possibility of application for an additional scholarship. However, the academic excellence is the only criterion for selection.

### Whom to address the inquiries

For further information, you may contact [Laurent Bruneau](#), [Vojkan Jakšić](#), or [Armen Shirikyan](#).

Interested candidates should send a detailed CV and ask for two recommendation letters (sent directly by the reference). The CV and the letters should be sent by email to the three persons mentioned above. The call will be open until the positions are filled. The offers are subject to the approval of the PhD schools of the two universities.