

4-year PhD Fellowship in Metaphysics and Philosophy of Physics, University of Geneva, Switzerland

The University of Geneva (<https://www.unige.ch/lettres/philo/en/homepage/>) offers a 4-year fully funded PhD position within Dr. Baptiste Le Bihan's SNSF Starting Grant project *Space, Time and Causation in Quantum Gravity*. The project will be housed at the *Geneva Symmetry Group*, which is part of the Department of Philosophy of the University of Geneva (<https://genevasymmetrygroup.wordpress.com/>).

Applications from members of groups that are currently underrepresented in academic philosophy are strongly encouraged.

Gross Salary: 47'040 CHF First Year; 48'540 CHF Second Year; 50'040 CHF Third and Fourth Year. The selected candidate will have access to research funding.

Starting Date

1st September 2023 or as soon as possible thereafter.

Scientific Requirements

Candidates must have completed an MA degree in philosophy (under exceptional circumstances, candidates with a MA degree in physics could be considered). The ideal candidate has a background in both contemporary metaphysics and philosophy of physics with a focus on the philosophy of causation and wants to write a dissertation in the philosophy of causation, in relation to contemporary physics. However, candidates with a background only in philosophy of physics or metaphysics may apply. Demonstrable knowledge of the metaphysics of causation is desirable. The appointee will be expected to work on a topic related to the *Space, Time and Causation in Quantum Gravity* project and complete their final dissertation in 4 years. They will investigate the advantages and issues of a number of theories of causation in the context of hypotheses of emergent causation and non-spatiotemporal causation. Cf. the description of the project below.

Language Requirements

Geneva is part of the French-speaking area of Switzerland, but for the purposes of the position only English is mandatory. Proficiency in French is not necessary at the time of application (but PhD candidates will eventually have to pass a French exam before submitting their thesis).

Further Information

Candidates are encouraged to contact Dr. Baptiste Le Bihan (Baptiste.LeBihan@unige.ch) for further details regarding the project and the position.

How to Apply

Applications must be submitted as a single PDF file named [your last name].pdf, starting with the CV with e-mail address on top. Applications must be sent to: baptiste.lebihan@unige.ch. Please indicate "PhD Fellowship Application" in the subject line.

They should include the following items:

1. CV
2. Cover letter explaining your interest in the topic, including a brief description of the direction of research you would like to undertake in the context of the *Space, Time and Causation in Quantum Gravity* project (more information about the project than what can be found above is available upon request)
3. A writing sample (e.g. a Chapter of M.A-thesis, approx. 15-20 pages)
4. The name and e-mail address of two potential academic references

Application Deadline

Applications must be submitted by March 1st, 2023, to ensure full consideration.

Brief Description of the Project

Does space exist over and above the objects around us? How does time differ from space? Recent scientific advances herald nothing less than a conceptual revolution regarding those questions with the stunning idea that space and time are not, fundamentally, real. This revolution comes from quantum gravity, a network of research programs in theoretical physics that aim at developing a novel and more explanatory framework for weaving together the knowledge from our current best and most fundamental physical theories: the general theory of relativity and quantum physics. Many approaches to quantum gravity imply that some properties usually considered as the hallmarks of space and time, such as spatial distances or temporal order, do not exist fundamentally and emerge from a more fundamental non-spatiotemporal structure. However, to fully understand the emergence of space and time and its philosophical implications, we must also account for the causal relations that seem to structure the natural world, and enable human beings to interact causally with their environment. Indeed, the non-fundamentality of space and time seems to stand in the way of a straightforward analysis of causal relations in terms of causes and effects, located in space and time in temporal sequences. This raises the question of how to reconceptualize causation in a non-spatiotemporal world. The project aims at articulating and evaluating various conceptions of causation compatible with a fundamentally non-spatiotemporal world.