Dates
17-18 October 2024

Venue
IQOQI Seminar Room
Boltzmanngasse 3, 1090 Vienna

Website
www.iqoqi-vienna.at/detail/event/the-case-for-quantum-probabilism

Sponsors/Organizing institutions
Archives Husserl, École Normale Supérieure, Paris
Institute for Quantum Optics and Quantum Information, Vienna

Organizers
Michel Bitbol
Časlav Brukner
Stefano Osnaghi

Contact
Stefano Osnaghi

Title
The case for quantum probabilism

Description
What is the relationship between rational agency and the quantum? One way to approach this question is to focus on probabilism, the doctrine that rational beliefs ought to conform to the probability calculus. To the extent that the beliefs prescribed by quantum mechanics cannot be interpreted in terms of ordinary probabilities, a way of preserving the spirit, if not the letter, of probabilism in view of quantum phenomena is to introduce new criteria of rationality which select certain classes of "generalized probabilities". But what are generalized probabilities? And how can the new criteria be justified? The workshop's aim is to investigate whether models of correct reasoning based on a broadly representational account of conceptual activity allow us to satisfactorily answer those questions and whether any promising alternatives exist.

Program

THURSDAY 17 OCTOBER

9.45-9.50 OPENING

9.50-10.35 **J. Steeger** (Bristol) *A pluralist approach to quantum probabilism*

10.35-11.20 **G. Bacciagaluppi** (Utrecht) *Probabilism vs epistemicism*

11.20-11.30 BREAK

11.30-12.15 **R. Schack** (London) *Quantum dynamics happens only on paper*
12.15-13.00 **S. Osnaghi** (Vienna) *A quantum myth of the Given*

13.00-15.00 LUNCH BREAK

15.00-15.45 **P. Berghofer** (Graz) *Quantum probabilities are objective degrees of epistemic justification*

15.45-16.30 **M. Bitbol** (Paris) *Probabilism as a principle of science*

16.30-16.45 BREAK

16.45-17.30 **F. Del Santo** (Geneva) *Probabilities as a limited knowledge of potentialities*
17.30-18.15 **R. Healey** (Tucson) *Quantum probabilism and the right kind of objectivity*

FRIDAY 18 OCTOBER

09.45-10.30 **M. Müller** (Vienna) *Thinking twice inside the box: is Wigner's friend really about quantum theory?*
10.30-11.15 **B. Dakić** (Vienna) *From classical to quantum: Revisiting Kolmogorov probability theory for a unified framework*
11.15-12.00 **Č. Brukner** (Vienna) *Incompatible probabilities in quantum mechanics with finite resources*

12.00-12.30 DISCUSSION