Special Issue

Quantum Foundations: 100 Years of Born's Rule

Message from the Guest Editor

This Special Issue aims to explore these foundational questions from physical, mathematical, and philosophical perspectives. We invite original papers and comprehensive reviews that provide an appraisal of the Born rule and its place in modern quantum physics, or that highlight new research directions in the foundations of quantum mechanics. Suitable topics include (but are not limited to) the following:

- Derivations of the Born rule;
- Interpretations of probability in quantum mechanics and its relationship to classical probability;
- Interpretations of the wave function;
- The Born rule in relativistic quantum theory;
- Quantum equilibrium versus thermodynamic non-equilibrium;
- The scope and status of the quantum measurement formalism;
- Epistemic limits and empirical (in)equivalence;
- Possibility of new experimental tests of quantum statistics.

Guest Editor

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Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

Editor-in-Chief

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