# Special Issue

# Entropic Uncertainty Relations and Their Applications

### Message from the Guest Editor

It is well-known that the uncertainty principle is at the very heart of quantum theory, and it provides the clear distinction from an ordinary classical picture on the understanding of our nature. Through the later development of its quantification, it has been known that the scope of quantum uncertainty has been extended further using the notion of entropy, and it has been understood that the richer structure of quantum state characterization using entropy is also possible to be further unveiled. Additionally, recent development in information theoretic approaches on the various quantum states is also strongly motivating us to inspect the structural details of the quantum states through the new windows—entropic uncertainty relation. In this regard, we believe that there are a vast number of new challenges in the direction of investigation still remaining, and there is much of interest to be revealed through the characterization of the unknown. We would like to open this to your valuable contribution.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 November 2019)

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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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