## **Special Issue**

# Statistical Methods for Modeling High-Dimensional and Complex Data

## Message from the Guest Editor

Information theory originating from Claude Shannon's 1948 work is a mathematical theory of communication. Entropy is a key measure in information theory, which quantifies the amount of uncertainty contained in outcomes of random phenomena. Information theory has broad applications in many scientific fields. The introduction of information theory to statistics was done by Kullback and Leibler (1951). Since then, many information theory-based methods have been developed for statistical variable selection, clustering analysis, statistical signal detection, change-point analysis, and deep learning, among others. In this Special Issue, contributions will be collected on the latest development of information theory-based methods in statistical modeling, especially the newly developed information theory-based methods for modeling high-dimensional, complex data.

#### **Guest Editor**

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## Deadline for manuscript submissions

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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.

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