



Maximum Entropy and Bayesian Methods for Image and Spatial Analysis

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Deadline for manuscript
submissions:

closed (17 March 2024)

Message from the Guest Editors

The maximum entropy framework (Jaynes, 1957a) is a cornerstone of statistical inference, and it has a privileged position as the only consistent method for combining different data into a single image.

In a Bayesian view, probabilities are seen as degrees of belief that are modified by information, which is refined as more information becomes available. In the presence of limited information, Bayesian probabilities are often easily assigned where conventional probabilities cannot.

Due to these properties, both maximum entropy and Bayesian approaches have been used massively in image analysis and processing as well as in spatial statistics, i.e., analysis of data observed in geographical space. The combination of Bayesian approaches with the maximum entropy method provides a great inference method.

This Special Issue will accept unpublished original research papers and comprehensive reviews on maximum entropy and Bayesian methods with applications on image data as well as on more general spatial data.





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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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