

## Topical Collection

# Entropy in Image Analysis

### Message from the Collection Editor

Image analysis is a fundamental task for extracting information from images acquired across a range of different devices. This analysis often needs numerical and analytical methods that are highly sophisticated, particularly for those applications in medicine, security, and remote sensing where the results of the processing consist of data of vital importance. Since it is involved in numerous applications that require reliable quantitative results, image analysis has produced a large number of approaches and algorithms, sometimes limited to specific functions in a small range of tasks, sometimes generic enough to be applied to a wide range of tasks. In this framework, a key role can be played by entropy, in the form of Shannon entropy or generalized entropy, used directly in processing methods or in the evaluation of results, to maximize the success of a final decision support system. I solicit your contribution to this Topical Collection of this journal, which is devoted to the use of entropy in extracting information from images and to the decision processes related to image analyses.

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### Collection Editor

Dr. Amelia Carolina Sparavigna

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## Entropy

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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