# Special Issue

# Ring, Phases, Self-Similarity, Disorder, Entropy, Information

### Message from the Guest Editors

Information and Entropy are challenging notions for theoretical modeling, technical analysis and numerical simulation, in physics and mathematics. In fact, information and entropy lead the closing of complex systems. In this frame, the concept of the interior and exterior involves the fundamental issues of self-referencing. We can find this self-reference included in arithmetic and obviously in computer science. In this context, the notions of time play a key role as shown in computation, and consequently the notions of entropy, namely of energy dissipation, associated with them. Category theory opens up new perspectives in this issue because the notion of adjunction builds the self-reference (possibly filtered), which then appears to be consubstantial with this theory, which, being linked to the concept of physical action, creates a link between the concept of morphism and information, and therefore between information and irreversible processes (procedures). Theories and applications developed based on these fundamental concepts, and other related ones, are considered a veritable contribution to this Special Issue.

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### Deadline for manuscript submissions

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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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