



entropy



an Open Access Journal by MDPI

## Unconventional Methods for Particle Swarm Optimization II

Guest Editor:

**Prof. Dr. Leonardo Vanneschi**

NOVA Information Management  
School (NOVA IMS), Universidade  
Nova of Lisbon, Campus de  
Campolide, 1070-312 Lisboa,  
Portugal

Deadline for manuscript  
submissions:

**closed (30 June 2021)**

### Message from the Guest Editor

Particle swarm optimization (PSO) is a population-based optimization metaheuristic inspired by the collective dynamics of groups of animals, like insects, birds, and fishes. Recent research trends have indicated the potentiality of the approach and its possibilities for improvement. With the term “unconventional methods for PSO”, we mean modifications of the standard PSO algorithm with the objective of improving its performance or bestowing on it some particular properties. Examples include new methods for choosing the inertia weight, constriction factor, or cognition and social weights; parallelizing PSO in several different ways; defining hybrid algorithms in which PSO is integrated with other types of metaheuristic optimization methods; and entropy-based PSO. The study of unconventional methods for PSO is a very lively and active research field, and the objective of this Special Issue is to present a collection of studies in this recent and exciting area, with a particular focus on entropic, information-theoretic, or probability-theoretic techniques.



[mdpi.com/si/63781](https://mdpi.com/si/63781)

# Special Issue



# entropy



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Kevin H. Knuth

Department of Physics, University  
at Albany, 1400 Washington  
Avenue, Albany, NY 12222, USA

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [PubMed](#), [PMC](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Physics, Multidisciplinary) / CiteScore - Q1 (Mathematical Physics)

## Contact Us

---

Entropy Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/entropy](http://mdpi.com/journal/entropy)  
[entropy@mdpi.com](mailto:entropy@mdpi.com)  
[X@Entropy\\_MDPI](#)