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# **Entropy in Dynamic Systems**

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Deadline for manuscript submissions: closed (30 September 2018)



### Message from the Guest Editors

Dear Colleagues,

This Special Issue aims at covering diverse research from qualitatively different sciences, linked by dynamical entropy phenomena, understood in a broad manner. In particular, the following topics are of interest:

- Complex analysis of difference and differential equations;
- Dynamics and control of complex engineering systems;
- Advances in fractional calculus;
- Mathematical modelling of entropy in classical and generalized dynamical systems;
- Entropy in physics, applied mathematics and information theory;
- Entropy-based approaches to study transportation, social, financial and economical networks;
- Deterministic chaotic versus stochastic processes;
- Vibration signal processing and complex dynamics;
- Entropy, Lyapunov exponents, Fourier and wavelet transforms and dimension;
- Local, metric, topological, symbolic extension and smooth/non-smooth dynamical entropy.

Prof. Dr. Jan Awrejcewicz Prof. Dr. Jose A.T. Machado *Guest Editors* 







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### **Editor-in-Chief**

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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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