

Special Issue

Entropy and Cardiac Physics III

Message from the Guest Editors

We aim to present innovative approaches to and applications of heart rate variability (HRV) in the interdisciplinary field of neurovegetative cardiovascular control. By presenting the cutting-edge research in this area, we hope to foster new collaborations and increase the dissemination of ideas, as well as to emphasize the importance of interdisciplinary work. HRV provides non-invasive markers of the functioning of the autonomous nervous system (ANS). Traditionally, HRV is quantified by linear time-domain measures such as standard deviation and root mean square, or by spectral analysis of the HRV power. However, ANS is not a linear system, and it has been argued that non-linear analysis would be more suitable for HRV. The most used non-linear methods to assess heart-rate dynamics are based on the concepts of chaos, fractality, and complexity: Poincaré plot, recurrence plot analysis, fractal dimension (and the correlation dimension), detrended fluctuation analysis, and entropies. For this Special Issue, we welcome submissions related to the use of entropy measures in cardiovascular physics.

Guest Editors

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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.

Editor-in-Chief

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