Special Issue

Entropy for Characterization of Uncertainty in Risk and Reliability

Message from the Guest Editors

Uncertainty characterization in risk and reliability has been addressed based on different approaches such as Bayesian thinking, possibilistic theory and fuzzy logic. Entropy has emerged as a promising approach due to its flexibility in representing uncertainty based on a multitude of evidence types as well as on different domains of application. Information entropy, maximum entropy and thermodynamic entropy have been the focus of current research clearly indicating the enormous scope and potential of entropy based uncertainty characterization and applications to several fields such as structural integrity and prognostics and health management. This special issue invites original papers on theoretical development in Entropy Based Uncertainty Characterization in Risk and Reliability as well as their applications in areas such as Probabilistic Physics of Failure, Structural Integrity, Prognostics and Health Management, Degradation and Damage Modeling, and Entropy Theory of Aging.

Guest Editors

Prof. Dr. Mohammad Modarres

Center for Risk and Reliability, Clark School of Engineering, University of Maryland, College Park, MD 20742-7531 USA

Prof. Enrique López Droguett

University of Maryland, College Park, USA;
Mechanical Engineering Department, University of Chile, Santiago, Chile

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Entropy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
entropy@mdpi.com

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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.

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

Prof. Dr. Kevin H. Knuth
Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

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