# Special Issue

# Loop Entropy

## Message from the Guest Editor

Macromolecules such as polypeptides and nucleic acids form the basis for all living things. These molecules typically fold into tertiary structures that have highly ordered regions. However, it is often the case that some aspects of these tertiary structures remain underdetermined when viewed as a static object. This underdetermination manifests itself in the form of hinge and breathing motions, allosteric reorganization, intrinsically disordered regions, and loop motions. In this special issue of Entropy, models of the various aspects of conformational variability in biological macromolecules are examined. Concepts from polymer theory, statistical thermodynamics, computer science, molecular dynamics simulation, stochastic modeling, and information theory will be used to model the conformational disorder of biomolecules both in their denatured and folded states. Gregory S. Chirikjian

## Guest Editor

Prof. Dr. Gregory S. Chirikjian

Department of Mechanical Engineering, Johns Hopkins University, 223 Latrobe Hall, 3400 North Charles Street, Baltimore, MD 21218-2682, USA

## Deadline for manuscript submissions

closed (20 December 2012)

Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/si/1152

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

mdpi.com/journal/entropy

# Entropy

an Open Access Journal by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed

mdpi.com/journal/entropy

# 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

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

## 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)

MDPI