



entropy



an Open Access Journal by MDPI

## Loop Entropy

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)**

### Message from the Guest Editor

Dear Colleagues,

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*



[mdpi.com/si/1152](http://mdpi.com/si/1152)

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](#)