



## Tunneling in Complex Systems

Guest Editors:

**Prof. Dr. Eric J. Heller**

Department of Physics and  
Department of Chemistry and  
Chemical Biology, Harvard  
University, Cambridge, MA 02138,  
USA

**Dr. Micheline Soley**

Department of Chemistry and  
Department of Physics-Affiliate;  
University of Wisconsin-Madison,  
Madison, WI 53706, USA

Deadline for manuscript  
submissions:

**31 July 2024**

### Message from the Guest Editors

This Special Issue aims to bring together discussions of quantum tunneling from different fields to address the questions of what constitutes tunneling, how it relates to its counterparts such as Anderson localization and quantum reflection, in addition to generating further knowledge and innovations and highlighting what unites tunneling across disciplines. Topics include but are not limited to:

- tunneling in thermal systems
- many-body tunneling
- tunneling time
- dynamical tunneling
- chaos-assisted tunneling
- coherent vs incoherent tunneling
- role of Planckian times
- tunneling in glassy systems
- tunneling in quantum solids like H<sub>2</sub> below 13 K
- tunneling in molecules
- tunneling in biological systems



[mdpi.com/si/175549](https://mdpi.com/si/175549)

# Special Issue



## 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, St. Alban-Anlage 66  
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)  
[@Entropy\\_MDPI](https://twitter.com/Entropy_MDPI)