## **Special Issue**

# Coarse and Fine-Grained Aspects of Gravitational Entropy

## Message from the Guest Editors

This proposed Special Issue aims to explore the coarse and fine-grained aspects of gravitational entropy, fostering dialogue across diverse subfields of research. The Special Issue will cover a broad range of topics, including, but not limited to, the following:

- Black hole thermodynamics and beyond;
- Extremal and near-extremal black holes;
- Hawking radiation and the island formula;
- Entropy inequalities and covariant entropy bounds;
- Entropic origins of gravity;
- Bit threads and holographic entanglement entropy;
- Alternative measures of entropy in holography;
- Algebraic approach to entropy;
- Quantum reference frames and edge modes;
- Stringy models and microstate counting.

By addressing both coarse and fine-grained aspects of gravitational entropy, this Special Issue will contribute significantly to the discourse surrounding one of the most fundamental questions in theoretical physics: how do we understand the nature of entropy in a gravitational context? We invite submissions from researchers worldwide to enrich this dialogue and advance our collective understanding of gravitational entropy.

#### **Guest Editors**

Dr. Juan F. Pedraza

Dr. Andrew Svesko

Dr. Manus R. Visser

### Deadline for manuscript submissions

31 August 2025



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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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