

## Special Issue

# Turbulence and Energy Dissipation in Solar System Plasmas

### Message from the Guest Editors

Highly nonlinear turbulent dynamics play a fundamental role in cross-scale energy transfer and particle energization in astrophysical plasmas. A wide array of turbulent plasmas are found within our own solar system – ranging from the solar corona and solar wind to the terrestrial and planetary magnetospheres. These systems can be directly probed by a range of spacecraft missions, including Magnetospheric Multiscale, Parker Solar Probe, Solar Orbiter, BepiColombo, Juno, and many more, making these some of the best regions for exploring plasma turbulence in the collisionless regime. In this Special Issue, we invite both observational and numerical studies focused on examining the turbulence within the varied systems in the solar system, with the aim of assembling a body of work that highlights the similarities and differences in turbulent dynamics and dissipation within the different environments. This collection will thus help to consolidate the knowledge of plasma turbulence gleaned from these systems and guide future research into astrophysical turbulence.

### Guest Editors

Dr. Luca Franci

Astronomy Unit - School of Physics and Astronomy, Queen Mary University of London, 327 Mile End Road, London E1 4NS, UK

Dr. Julia E. Stawarz

Imperial College London, South Kensington Campus, London SW7 2AZ, 6M71Huxley Building South, Kensington Campus, London SW7 2AZ, UK

### Deadline for manuscript submissions

closed (15 November 2021)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9

---



[mdpi.com/si/60286](https://mdpi.com/si/60286)

*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)

[mdpi.com/journal/  
atmosphere](https://mdpi.com/journal/atmosphere)





# Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/journal/  
atmosphere](https://mdpi.com/journal/atmosphere)



## About the Journal

### Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

---

### Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

---

### 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), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

#### Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))