Special Issue

Solar Wind Turbulence: New Advances from the Parker Solar Probe and Solar Orbiter Space Missions

Message from the Guest Editor

Turbulence is a universal phenomenon observed everywhere in Nature and every day in ordinary life. Nevertheless, it is the last unsolved problem of classical physics (Feynman R. P., 2005). The solar wind—a turbulent plasma flow emitted by the Sun and expanding into the heliosphere—is the only and the best available laboratory to study turbulence in an astrophysical plasma. Recent launches of the Parker Solar Probe (which will approach the Sun closer than ever before) and the Solar Orbiter spacecraft (which will study the Sun with a complete suite of remote-sensing and in-situ instruments) will significantly advance our understanding of space plasma turbulence, allowing us to tackle still-unanswered questions spanning from macrostructure to microphysics, such as: How and where does turbulence originate? Which are the physical mechanisms responsible for the energy transfer from large to small scales in the turbulent cascade? How is energy dissipated to heat the plasma? This Special Issue aims to collect research papers on pioneering observations which will help to shed light on these fundamental and still unanswered questions in space plasma physics.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

The multidisciplinary *Universe* journal is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the editorial board, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
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