Special Issue

Atomic Processes in Plasmas and Gases: Symmetries and Beyond

Message from the Guest Editor

Dear colleagues, Considerations of symmetry often play an important role in theoretical advances, especially in plasma spectroscopy and molecular spectroscopy. For example, the employment of additional conserved quantities originating from algebraic symmetries of underlying quantum systems frequently allows obtaining important analytical results and/or leads to more robust codes. This Special Issue welcomes presentations of new theoretical and experimental results on atomic processes in plasmas and gases (with or without the use of symmetries). This Special Issue also welcomes presentations of reviews (full-size or mini reviews) on any subfield of this broad research area.

Guest Editor

Prof. Dr. Eugene Oks

Department of Physics, Auburn University, Auburn, AL 36849-5319, USA

Deadline for manuscript submissions

closed (30 April 2021)

About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:
free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:
indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:
JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)