galaxies

an Open Access Journal by MDPI

IMPACT FACTOR 3.8

CITESCORE 6.3

Cosmic Rays around Supernova Remnants

Guest Editor:

Dr. Andrew W. Strong
Max-Planck-Institut fuer extraterrestrische Physik, 85748 Garching bei München, Germany

Deadline for manuscript submissions:
closed (30 November 2020)

Message from the Guest Editor

Dear Colleagues,

Supernova remnants (SNR) are probably a main source of high-energy particles in the galaxy, although this remains to be proved. Observations of related electromagnetic radiation (gamma rays, X-ray, synchrotron) provide clues to the details of the mechanisms involved in the acceleration and propagation of these cosmic rays (CR). Interaction with nearby gas clouds, amplification of the magnetic field, and secondary particle production in the remnants are of special importance. SNR affect CR observed at the earth, for example secondary positrons and antiprotons, as well as secondary nuclei. Evidence for a nearby recent supernova via radioactive ^{60}Fe is also changing our view of the subject. This Special Issue aims to cover current research on cosmic rays in and around SNR, both theoretical and observational. Other related sources like pulsar wind nebulae, pulsars and superbubbles, may also be addressed.

Dr. Andrew W. Strong
Guest Editor

galaxies

IMPACT FACTOR 3.8

CITESCORE 6.3

an Open Access Journal by MDPI

Editors-in-Chief

Dr. Margo Aller
Department of Astronomy, University of Michigan, Ann Arbor, MI 48109-1042, USA

Dr. Jose L. Gómez
Instituto de Astrofísica de Andalucía (IAA-CSIC), Glorieta de la Astronomía S/N, 18008 Granada, Spain

Message from the Editorial Board

Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, ESCI (Web of Science), Astrophysics Data System, INSPIRE, Inspec, and other databases.
Journal Rank: JCR - Q2 (Astronomy and Astrophysics) / CiteScore - Q2 (Astronomy and Astrophysics)

Contact Us

Galaxies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/galaxies
galaxies@mdpi.com
𝕏@Galaxies_MDPI