Special Issue

Research and Development for Gravitational Wave Detector

Message from the Guest Editors

The design of gravitational wave detectors and their upgrades is a fundamental phase in the development of gravitational wave science. All the instrumentation and experimental techniques are developed thanks to careful studies based on analytical and simulation works. Moreover, these tools are commonly used to study phenomena observed during the implementation and commissioning phase of the main detectors, in order to understand the origin and to predict unexpected effects that may degrade the detector performance. These studies are often fundamental for reaching the sensitivity target. A special issue on simulations and analytical studies done both during the commissioning period of gravitational wave detectors, in order to better understand their behavior, and during the design of upgrades for the enhancement of the present or future detectors, is proposed. This special issue will collect all the most relevant studies of this typology performed for the gravitational wave experimental field.

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About the Journal

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*.

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