



Innovative Experimental Techniques for Direct Dark Matter Detection

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Deadline for manuscript submissions:

closed (30 November 2021)

Message from the Guest Editors

Astronomical and cosmological observations strongly support the existence of dark matter (DM) in the Universe. However, it has yet to be observed and its nature—its mass and interaction—revealed. In recent years, the experimental progress has been impressive, exploring a large range of masses and cross sections. New experiments based on innovative detection techniques are currently being proposed, and will soon reach unprecedented sensitivity.

The aim of this Special Issue is to collect contributions for a discussion on the experimental techniques for DM detection. The scope is to describe the state of the art and the future perspectives of direct DM experiments, with a particular attention paid to innovative detection techniques. Topics of interest include, but are not limited to, the following areas: new detector technologies, experimental techniques exploiting additional interaction mechanisms, innovative event reconstruction, improved background modelling, and analysis strategies to enhance the sensitivity.





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Message from the Editor-in-Chief

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