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Radiation Spectroscopy with Solid Scintillators for Rare Events

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Message from the Guest Editors

Crystal scintillators are one the most useful and effective tool for the detection and spectroscopy of a wide variety of radiations. The continuous development of their performances allows applications in many challenging research fields. In fact, crystal scintillators are fundamental instruments to study most important problems in in particle and nuclear physics, astrophysics and cosmology. Further to this, when the radio-purity of such detectors is an additional requirement, their use in the investigation of rare processes becomes extremely competitive. Moreover, the possibility of significant enrichments in some specific isotopes strongly enlarges the applications for the investigation of several rare processes, such as dark matter candidates of various natures, $\beta\beta$ decay modes, rare nuclear decay modes, solar axions, electron stability, matter stability, search for exotic particles in cosmic rays, etc.

The aim of this Special Issue is to collect contributions for a suitable discussion on the performances and developments of crystal scintillators for rare events.

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Special Issue