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Abstract for an Invited Paper for the HAW14 Meeting of the American Physical Society

Recent work of decay spectroscopy at RIBF PÄR-ANDERS SÖDERSTRÖM, RIKEN Nishina Center

 β - and isomer-decay spectroscopy are sensitive probes of nuclear structure, and are often the only techniques capable of providing data for exotic nuclei that are producted with very low rates. Decay properties of exotic nuclei are also essential to model astrophysical events responible for the evolution of the universe such as the rp- and r-process. The EURICA project (EUROBALL RIKEN Cluster Array) has been launched in 2012 with the goal of performing spectroscopy of very exotic nuclei. Since 2012, four experimental campaigns have been successfully completed using fragmentation of ¹²⁴Xe beam and in-flight-fission of ²³⁸U beam, approaching for example the key nuclei ⁷⁸Ni, ¹¹⁰Zr, ¹⁰⁰Sn, ¹²⁸Pd, and ¹³⁸Sn. This contribution highlights the experiments performed, results obtained, and discusses the future perspective of the EURICA project.

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