

Exploring the neutron-rich actinide region via ion-trap techniques for nuclear astrophysics applications

Monday, 28 August 2023 14:00 (40 minutes)

The neutron-rich actinide region is of interest as it is thought to be related to the endpoint of the nucleosynthesis via the rapid neutron-capture process (r-process), where the actinide elements such as uranium are formed by beta-decays and middle-mass nuclei are served by nuclear fissions. To explore this region and measure fundamental nuclei properties related to the nucleosynthesis including nuclear mass, half-life, decay scheme, and fission patterns, we are employing ion-trap techniques to develop experimental apparatus. This presentation will outline our recent achievements and developments and future prospects.

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