

## **Studies of exotic nuclei and explosive stellar burning with fast RI beams at RIKEN RIBF**

RIKEN RI Beam Factory (RIBF) is a new-generation facility for radioactive isotope (RI) beams based on the projectile-fragmentation and uranium in-flight fission as production using 345 MeV/nucleon heavy-ion primary beams. RIBF started its regular operation in 2007, and has provided beams of various nuclei very far from the stability valley with world highest intensities. Recent highlights of studies of nuclear structure and astrophysics will be presented. Hot topics include properties of light unbound nuclei, evolution of nuclear shell structure, and nuclear inputs to studies of r-process nucleosynthesis.

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