HAW14-2014-020010

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

## Mass Measurement for R-process Nuclei at RIBF TOMOHIRO UESAKA, RIKEN Nishina Center for Accelerator-Based Science

Precise mass measurements of extremely rare radioactive nuclei (RI) are critical in revealing nature of the r-process nucleosynthesis that is considered to be an origin of elements heavier than iron. Unprecedentedly high intensity RI beams produced at RIBF provide us a good chance to make a direct mass measurement of the r-process nuclei. At RIKEN, two advanced devices for the mass measurement have been developed: Rare RI Ring and MR-TOF coupled with SLOWRI. In the workshop, I will discuss a strategic plan of mass measurements of r-process nuclei, with the two devices, at RIBF.