

HAW14-2014-000741

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

### **Mass Measurement with Rare-RI Ring**

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Mass measurement with Rare-RI Ring in RIKEN RI Beam Factory (RIBF) will be presented. The main purpose of Rare-RI Ring is to measure the mass for very neutron-rich nuclei, the production rate of which is very small (rare RI) and the life-time of which is predicted to be very short (less than 10 ms). In Rare-RI Ring, mass measurements will be performed based on isochronous mass spectrometry. There are two innovative apparatus in Rare-RI Ring: individual injection, which can realize the injection of 200 A MeV rare RI one-by-one, and a cyclotron-like storage ring, which allows high isochronous magnetic fields with large angular and momentum acceptances ( $\sim 1\%$ ). By these apparatus, we will achieve a  $10^{-6}$  mass resolution, and will be able to access rare RI, the production rate of which is down to 1 event/day/pnA in RIBF. Construction of Rare-RI Ring has started from the 2012 fiscal year. Construction of the storage ring itself was almost completed. In this fiscal year, we succeeded to store alphas from 241Am source and to check the production of isochronous fields in the storage ring. In this talk, present status of Rare-RI Ring and the possible mass measurement there will be presented.