

国立研究開発法人理化学研究所 仁科加速器研究センター 第214回 RIBF核物理セミナー RIKEN Nishina Center for Accelerator Based Science The 214<sup>th</sup> RIBF Nuclear Physics Seminar

Present status and future plans for MRTOF-MS at RIBF

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The multi-reflection time-of-flight mass spectrograph (MRTOF-MS) has recently become a popular tool throughout the world. Initially envisioned as rapid, high-precision mass analyzers, several facilities are also developing these devices for purposes of efficient isobar purification. Thus far, their use in precision mass spectroscopy has only been demonstrated by the ISOLTRAP group and our RIBF/SLOWRI group. We have utilized our first MRTOF-MS for precision mass spectroscopy, applying it online to isotopes of Fr and At along with several offline measurements. It will soon be used for measurements of trans-fermium elements. A second MRTOF has been constructed and will soon be tested; it is ear-marked for mass spectroscopy with SLOWRI at BigRIPS. A third MRTOF-MS will also be built, in conjunction with IBS, for application with KISS.

I will describe the operation of the MRTOF-MS, along with our methods of mass analysis, recent results, and near-future plans.

Feb. 12th (Fri.)2016 13:30 ~ RIBF Hall (rm.201), RIBF bldg., RIKEN \* The talk will be given in English language..

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