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242回 RIBF核物理セミナー
RIKEN Nishina Center for Accelerator Based Science
The 242nd RIBF Nuclear Physics Seminar

First result of the SCRIT electron scattering facility

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We constructed the SCRIT electron scattering facility at RIBF in order to realize electron scattering off unstable nuclei. Electron scattering provides the most powerful and reliable information about the structure of atomic nuclei as demonstrated for stable nuclei in the latter half of the 20th century. Meanwhile electron scattering with unstable nuclei has not been realized yet since it is difficult to prepare these nuclei as the target material due to rare and short-lived features. We have invented new target forming technique named Self-Confining Radio-Isotope Ion Target (SCRIT), in which nuclei of interest are three-dimensionally trapped as a target along the electron beam axis. The luminosity required for elastic electron scattering (10^27 [1/cm^2/s]) was achieved with only 10^8 target ions.

In this seminar, I will report the first result of electron scattering from 132Xe at the SCRIT electron scattering facility and some future prospects.

＊ The talk will be given in English language..

Jul.11th(Tue.)2017 13:30～
RIBF Hall (rm.201), RIBF bldg., RIKEN

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