

Advanced Research Center for Beam Science

– Particle Beam Science –



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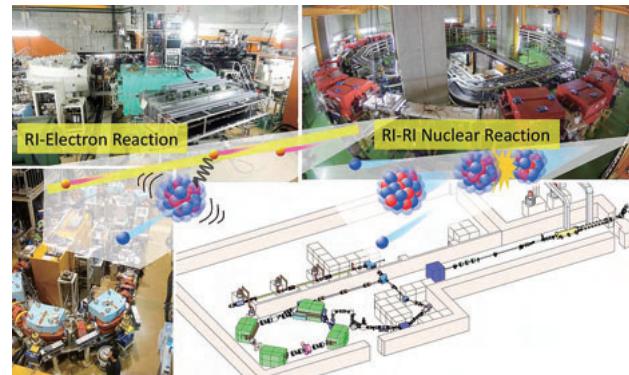
Scope of Research

One of our research is an experimental research for unstable nuclear structures by means of the electron and heavy-ion accelerators. We address the technical development in an RI beam production driven by a high-energy electron beam, an electron scattering from the RI's in combination with the RI target inserted in an electron storage ring, and the precision mass measurement for extremely short-lived and rare exotic nuclei using a heavy-ion storage ring. We will address some technical development aiming at a nuclear photo-absorption cross-section measurement and the beam recycling in a heavy-ion storage ring to study the nuclear reactions involving rare exotic nuclei.

KEYWORDS

Beam Physics
Unstable Nuclear Physics
Electron Linac

Accelerator Physics
Storage Ring



Recent Selected Publications

Tsukada, K.; Abe, Y.; Enokizono, A.; Goke, T.; Hara, M.; Honda, Y.; Hori, T.; Ichikawa, S.; Ito, Y.; Kurita, K.; Legris, C.; Maehara, Y.; Ohnishi, T.; Ogawara, R.; Suda, T.; Tamae, T.; Wakasugi, M.; Watanabe, M.; Wauke, H., First Observation of Electron Scattering from Online-Produced Radioactive Target, *Phys. Rev. Lett.*, **131**, 092502 (2023).

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