



Contribution ID: 13

Type: **Invited talk**

## Present and future of the Rare-RI Ring facility at RIBF

The Rare-RI Ring (R3) facility is a unique storage ring facility coupled with the cyclotron complex at the RIKEN RI beam factory [1]. Ions of interest are in-flight selected and are individually injected in the storage ring where the precision isochronous condition is realized. The event-by-event data processing is performed with information from auxiliary detectors installed at the fragment separator BigRIPS. Since the successful developments of related devices and construction in 2013, several experiments have been conducted; a highlight is the masses in the vicinity of the r-process nucleosynthesis [2]. In this talk, I will summarize the physics programs, completed and planned, at the BigRIPS-R3 facility, and will discuss possible extensions and collaborations in the future.

### References

- [1] D. Nagae et al., Phys. Rev. C 110, 014310 (2024).
- [2] H.F. Li et al., Phys. Rev. Lett. 128, 152701 (2022).

**Primary author:** YAMAGUCHI, Takayuki (Saitama University)

**Presenter:** YAMAGUCHI, Takayuki (Saitama University)