



## Dawn of new era for nuclear physics prevailed by the 2nd generation RI beam accelerator facilities in the world

*Thursday 25 September 2025 17:30 (1 hour)*

The mission of the RIKEN Radioactive Isotope Beam Factory (RIBF) is to improve our understanding of the mechanism of synthesis of elements in the universe via experiments using intense heavy-ion beams. The RIBF accelerator complex consists of booster ring cyclotrons and three injectors of AVF cyclotron, RIKEN Linear ACcelerator (RILAC), and RILAC2. Beams of ion species ranging from hydrogen to uranium are accelerated in accordance with experimental requirements. The RIBF has started providing intense heavy-ion beams for RI beam production and achieved the beam power of 10 kW for the uranium beams. Recently the projects of the second generation heavy-ion facilities are on-going all over the world, FAIR in Germany, SPIRAL2 in France, FRIB in the USA, RAON in Korea, and HIAF in China. Most of them are based on superconducting linac aiming at higher beam power. Obviously the field of nuclear physics is going into a new era. This talk will share the new coming prospects of nuclear physics explored with these 2nd generation facilities.

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Yes

### Footnotes

### Funding Agency

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