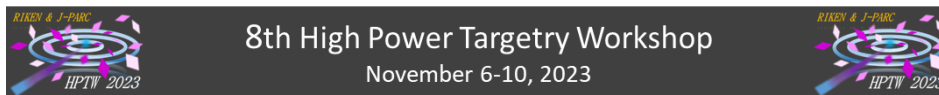


8th High Power Targetry Workshop (HPTW2023)



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Status and R&D of the target and beam dump at FRIB

Friday, 10 November 2023 10:15 (15 minutes)

The FRIB accelerator, constructed and commissioned in 2021, serves as a pioneering facility to produce rare isotopes and access elements lying beyond stability. In early 2023, FRIB was successfully operated at 5 kW, employing beams of ^{36}Ar , ^{64}Zn , ^{36}Ar and ^{124}Xe directed onto a rotating single-slice graphite target, while effectively absorbing the remaining beam through an S-Shape static beam dump. The primary beam power is now being increased towards 10 kW. The enhanced single-slice graphite target system and the implementation of a minichannel static beam dump will enable the operation at 10 kW and potentially even higher power. This paper presents the current status and ongoing R&D efforts focused on the target and beam dump systems.

Themes for the contribution

4 Target design, analysis, and validation of concepts:

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