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Status of SCRIT facility for electron scattering measurement of short-lived nuclei

SCRIT facility [1] is a unique facility specifically designed for electron scattering measurement of short-lived nuclei. In 2023, we published the world's first result [2] of the electron scattering measurement of short-lived nuclei 137Cs.

In this presentation, we will show the current status of the SCRIT facility, and the future plan for upgrade in order to further measurement of much shorter-lived nuclei. The key development is the upgrade of the electron beam power to activate the photofission of Uranium to create the short-lived nuclei. Current electron-beam power is up to 20 W, but we are now installing a larger power supply for Klystron to accelerate high current electron beam.

In this poster, we will introduce the SCRIT facility and upgrade plan in more detail.

- [1] M. Wakasugi et al., Nucl. Instr. And Meth. B317, 668 (2013).
- [2] K. Tsukada, et al., Phys. Rev. Lett. 131, 092502 (2023).

Notes

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