

# Non-invasive beam profile monitors for the CSNS Accelerator

*Thursday, November 13, 2025 9:40 AM (20 minutes)*

The China Spallation Neutron Source (CSNS) is a major facility for neutron science in China, and is currently operating at an averaged beam power of 170 kW with a beam energy of 1.6 GeV and repetition rate of 25 Hz. In 2024, the CSNS Upgrade project (CSNS-II) was launched aiming to improve the average beam power to 500 kW. In the sequence, a number of new instrumentations will be equipped at the new superconducting linac, RCS and new beamlines. In this talk, we will present an overview of the new diagnostics and the corresponding the high-intensity challenges. The recent progresses on the non-invasive profile monitors, such as the ionization profile monitor and laser-wire profile monitor, will be highlighted.

## Paper submission Plan

No

## Best Presentation

No

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