Contribution ID: **104** Type: **Poster**

Simulation Study of LINAC with Thermionic Gun for Fourth-Generation Storage Ring

Thursday, November 14, 2024 1:00 PM (1h 30m)

We conducted the design and simulation study of a 200-MeV linear accelerator (LINAC) utilizing a thermionic gun, proposed as the injector system for a fourth-generation storage ring. The LINAC configuration consists of a thermionic DC gun, a sub-harmonic buncher (SHB), a buncher, and four accelerating tubes. Beam dynamics simulations were performed using PARMILA to optimize the system, with a focus on minimizing both beam size and energy spread, for a beam charge of 1 nC. Detailed simulation results will be provided in the presentation.

Paper submission Plan

No

Best Presentation

No

Contribution track

ICABU WG2. Beam Physics, Diagnostics & Novel Techniques

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Session Classification: ICABU Poster Session

Track Classification: ICABU: ICABU WG2. Beam Physics, Diagnostics & Novel Techniques