



Contribution ID: 548 Contribution code: SUP049

Type: Poster Presentation

## Start-to-end simulations of nanometer-emittance beam transport through an emittance exchange beamline

*Sunday 10 August 2025 15:00 (3 hours)*

We present start-to-end simulation study of the transport of a few pico-Coulomb, nanometer-emittance beam through an emittance exchange (EEX) beamline. EEX with nanometer-emittance beams has potential to enable research opportunities utilizing tunable and high quality attosecond bunches and nanometer-scale longitudinal bunch trains. To account future possibility of experimental demonstrations, the simulation implemented existing EEX beamline at Argonne Wakefield Accelerator (AWA) facility. Simulation was conducted using General Particle Tracer (GPT) code.

### Please consider my poster for contributed oral presentation

No

### Would you like to submit this poster in student poster session on Sunday (August 10th)

Yes

### Footnotes

### Funding Agency

### I have read and accept the Privacy Policy Statement

Yes

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**Session Classification:** SUP: Sunday Student Poster Session

**Track Classification:** MC5 –Beam Dynamics and EM Fields