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# Recent LANSCE efforts on improving H+ duoplasmatron capabilities

Wednesday 13 August 2025 16:00 (2 hours)

LANSCE uses a duoplasmatron ion source to produce H+ ion beams for the Isotope Production Facility, which uses 100 MeV proton beams to produce a variety of therapeutic and diagnostic isotopes for research purposes and also supports a variety of other experiments for materials and nuclear physics. We have recently begun work to improve the reliability, peak current, and lifetime of the ion source, while restoring existing capabilities to build new ion sources and filaments. This poster will cover these efforts, with a particular focus on the work to re-establish and improve the filament production capability and production of higher peak current beams.

### Please consider my poster for contributed oral presentation

No

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

No

#### **Footnotes**

LA-UR-25-24471

## **Funding Agency**

## I have read and accept the Privacy Policy Statement

Yes

**Authors:** WEISMANTEL, Adler (Los Alamos National Laboratory); ALEXANDER, Anna (Los Alamos National Laboratory); VERMEULEN, C. Etienne (Los Alamos National Laboratory); COCHRAN, Cole (Los Alamos National Laboratory); LOFTIN, Evan (Los Alamos National Laboratory); ROULEAU, Gary (Los Alamos National Laboratory)

Presenter: LOFTIN, Evan (Los Alamos National Laboratory)Session Classification: WEP: Wednesday Poster Session

**Track Classification:** MC3 - Novel Particle Sources, Acceleration Techniques, and their Applications