Contribution ID: **502** Contribution code: **TUXN01** Type: **Invited Oral Presentation**

A new multi-pulse kiloampere electron linac for dynamic x-radiography

Tuesday 12 August 2025 09:00 (30 minutes)

The Advanced Sources and Detectors (ASD) Scorpius project is a collaboration between Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratories, and the Nevada National Security Sites to develop and build a multi-pulse kiloampere-class 22 MeV electron accelerator for dynamic x-radiography for national security. The project has begun fabrication and assembly and is scheduled to become operational in 2028. Notably, ASD Scorpius uses a solid-state pulsed power system to deliver an extremely flexible range of electron –and thus x-ray –pulses. Also, the location of the accelerator in a pre-existing mine deep underground in Nevada imposes significant design constraints. This presentation will describe the design, current status, and plans for ASD Scorpius.

Please consider my poster for contributed oral presentation

Yes

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

Yes

Footnotes

This project is funded by DOE-NNSA contract 89233218CNA000001

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

Author: ASSADI, Saeed (Lawrence Livermore National Laboratory)

Presenter: ASSADI, Saeed (Lawrence Livermore National Laboratory)

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