



Contribution ID: 427

Type: **Poster Presentation**

Low Energy Accelerator Development Facility Upgrades

The Low Energy Accelerator Development (LEAD) Facility * is a part of the Accelerators Facilities Division (AFD) of the Brookhaven National Laboratory (BNL). The facility has three capabilities and runs a program specifically targeting new collaborations for user-driven research. The first and the oldest of the capabilities is the Ultrafast Diffraction (UED) Capability. The other two are radiation-shielded bunkers.

At the UED the deployment of a new stable solid-state modulator and klystron is in progress. The beamline updates are now going into place for a NASA Jet Propulsion Laboratory ** electron irradiator beamline for Single Event Effects (SEE) testing; and the capability for UED testing is being expanded.

In both bunkers (153 and 77 sq. m) a range of cooling, air, electrical, and RF capabilities are presently being introduced. The first bunker will accommodate the Electron Cyclotron Resonance *** (eCRA) Demonstrator (a project together with Omega-P, R&D). The deployment is expected to start in the last quarter of 2025. The second bunker will accommodate the superconducting radiofrequency (SRF) photo-gun **** (a project by Euclid Techlabs, LLC) to be the electron beam source for an envisioned Ultrafast Electron Microscopy (UEM) Capability.

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

- <https://www.bnl.gov/advtech/ast/> ** <https://www.jpl.nasa.gov/> *** <https://doi.org/10.18429/JACoW-IPAC2024-THPR70> **** <https://euclidtechlabs.com/superconducting-rf-technologies/>

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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