The Argonne EIC Team

About us

Argonne is a large multi-purpose National Laboratory

Lab has actively invested in EIC research through LDRD & Program Development funding

EIC effort a is collaboration between Medium Energy Physics, the Theory Group, and the High-Energy Physics Division

We draw on experience and resources across many divisions at Argonne (Computer Science, Material Science, Engineering, ALCF, …)

Infrastructure at Argonne

- Argonne Micro Assembly Facility (AMAF) with probe-station, wire bonders, metrology equipment, etc. The facility is for module assembly and loading.
- Permanent pixel telescope and cryogenic test-bed at the Fermilab Test Beam Facility (FTBF).
- Extensive data-acquisition experience in both PHY and HEP.
- A novel 10x10cm MCP-PMT fabrication and testing facility.
    - Existing relations through SBIR with industry partners on MCP-PMT fabrication and readout ASIC development.
- Argonne 4 Tesla Solenoid Facility for high-magnetic field testing of large detector prototypes.
- On-site accelerators: Argonne Wakefield Accelerator (AWA), Low-Energy Accelerator Facility (LEAF), Advanced Photon Source (APS), and Argonne Tandem Linac Accelerator System (ATLAS).
- Electronics Support Group for construction of electronic readout boards.
- Center for Nanoscale Materials (CNM) and the Material Sciences Division (MSD) for manufacturing and testing of superconducting nanowire sensors.
- Expertise with engineering and construction of large detector systems.
- Access to DOE Leadership HPC resources (ALCF), including the new Aurora exascale machine
- Large multidisciplinary lab: can leverage wealth of expertise available (e.g., material scientists, computational scientists, AI experts, engineering support, electronics support, ...)