Contribution ID: **329** Contribution code: **TUPD003** Type: **Poster Presentation**

Control system upgrade of Argonne Wakefield Accelerator facility

Tuesday 23 September 2025 16:00 (1h 30m)

As the Argonne Wakefield Accelerator (AWA) facility expanded, its original in-house control software could not keep up with the increasing complexity and scale of operations. To improve maintainability, reliability, and support future development, the AWA controls group undertook a major upgrade by adopting the Experimental Physics and Industrial Control System (EPICS). With support from the Advanced Photon Source (APS) Controls group, the AWA control system has been successfully upgraded from a centralized, difficult-to-maintain architecture into a flexible, scalable, and maintainable distributed system. This paper presents the current status of AWA's new EPICS-based control system and describes the experiences and lessons learned during the upgrade.

Footnotes

Funding Agency

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Session Classification: TUPD Posters

Track Classification: MC02: Control System Upgrades in Existing Facilities