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Type: 20-minute talk

EPICS in Context of Machine Learning, Beam Tuning and Offline Scientific Computing

Wednesday, April 26, 2023 9:00 AM (20 minutes)

This talk contextualizes EPICS in accelerator optimization and “quite big” data experiment support, for other AI/ML session talks. EPICS 7 had the aim of better computing supporting for the next generation of machines and analytical tools. Many new data types, such as matrices, tables, images, and statistical descriptions, plus users’ own data types, now supplement the simple scalar and waveform types of the classic EPICS. New EPICS based computational architectures for scientific computing are emerging for high-performance data processing, high fidelity archiving, pipelining, and classically offline physics. Python and matlab bindings support ML and science users. The result has been that controls are now being integrated with multi-particle modelling, machine learning, enterprise databases, experiment DAQs, and large legacy physics systems.

Please select if talk will be in person or on zoom

In person

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