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The FIFE Project at Fermilab: Computing for Experiments (15' + 5')

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The FabrIc for Frontier Experiments (FIFE) project is an initiative within the Fermilab Scientific Computing Division designed to steer the computing model for non-LHC Fermilab experiments across multiple physics areas.
FIFE is a collaborative effort between experimenters and computing professionals to design and develop integrated computing models for experiments of varying size, needs, and infrastructure. The major focus of the FIFE project is the development, deployment, and integration of solutions for high throughput computing, data management, database access and collaboration management within an experiment. To accomplish this goal, FIFE has developed workflows that utilize Open Science Grid compute sites along with dedicated and commercial cloud resources. The FIFE project has made significant progress integrating into experiment computing operations several services including a common job submission service, software and reference data distribution through CVMFS repositories, flexible and robust data transfer clients, and access to opportunistic resources on the Open Science Grid. The progress with current experiments and plans for expansion with additional projects will be discussed. FIFE has taken the leading role in defining the computing model for Fermilab experiments, aided in the design of experiments beyond those hosted at Fermilab, and will continue to define the future direction of high throughput computing for future physics experiments worldwide.

Primary author: Dr HERNER, Kenneth Richard (Fermi National Accelerator Laboratory (US))

Co-authors: KREYMER, Arthur (FERMILAB); DYKSTRA, Dave (Fermi National Accelerator Lab. (US)); BOX, Dennis (F); GARZOGLIO, Gabriele; BOYD, Joseph (Fermilab); RETZKE, Kevin (Fermilab); KIRBY, Michael (Fermi National Accelerator Laboratory); SHARMA, Neha (Fermilab); MHASHILKAR, Parag (Fermi National Accelerator Laboratory); LEVSHINA, Tanya (FERMILAB)

Presenter: Dr HERNER, Kenneth Richard (Fermi National Accelerator Laboratory (US))

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