



Contribution ID: 275

Type: **Oral**

LArSoft and Future Framework Directions at Fermilab

Monday 4 November 2019 11:15 (15 minutes)

The diversity of the scientific goals across HEP experiments necessitates unique bodies of software tailored for achieving particular physics results. The challenge, however, is to identify the software that must be unique, and the code that is unnecessarily duplicated, which results in wasted effort and inhibits code maintainability.

Fermilab has a history of supporting and developing software projects that are shared among HEP experiments. Fermilab's scientific computing division currently expends effort in maintaining and developing the LArSoft toolkit, used by liquid argon TPC experiments, as well as the event-processing framework technologies used by LArSoft, CMS, DUNE, and the majority of Fermilab-hosted experiments. As computing needs for DUNE and the HL-LHC become clearer, the computing models are being rethought. This talk will focus on Fermilab's plans for addressing the evolving software landscape as it relates to LArSoft and the event-processing frameworks, and how commonality among experiment software can be achieved while still supporting customizations necessary for a given experiment's physics goals.

Consider for promotion

Yes

Authors: Dr KNOEPFEL, Kyle (Fermi National Accelerator Laboratory); JONES, Christopher (Fermi National Accelerator Lab. (US))

Presenter: JONES, Christopher (Fermi National Accelerator Lab. (US))

Session Classification: Track 5 –Software Development

Track Classification: Track 5 –Software Development