ROOT Users Workshop



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12345: Lessons Learned building an Analysis Framework around RDataFrame and CMS NanoAOD

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With the advent of the Compact Muon Solenoid Experiment's smallest centrally-maintained data format, NanoAOD, a description of proton-proton collisions for general physics analysis is reduced to just 2-4kB per event. ROOT's RDataFrame, an efficient engine for processing HEP data using declarative syntax, easy multithreading, and flexible interfaces from C++ and python, is well-suited as a core building block for a new framework. Lessons learned, for both physicists looking to use RDF and developers looking for feedback, will be presented based on the experience of a lone graduate student building a framework "from scratch" to almost-public results.

Summary

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