

CutLang: a cut based HEP analysis language and interpreter

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“CutLang” software package contains a domain specific language that aims to provide a clear, human readable way to define HEP analyses, and an interpretation framework of that language. A proof of principle (PoP) implementation of the CutLang interpreter, achieved using C++ as a layer over the CERN data analysis framework ROOT, is presently available. This PoP implementation permits writing HEP analyses as a set of commands in human readable text files, which are interpreted by the framework at runtime. Initial experience with CutLang has shown that a just-in-time interpretation of a human readable HEP specific language is a practical alternative to analysis writing using compiled languages such as C++. The main features of the CutLang language and its interpreter will be presented in two educational analysis examples.

Presentation

Talk given in person

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