

History of the ROOT System: Conception, Evolution and Experience by Rene BRUN

Monday, February 22, 2010 5:30 PM (1 hour)

The ROOT system is now widely used in HEP, Nuclear Physics and many other fields. It is becoming a mature system and the software backbone for most experiments ranging from data acquisition systems, controls, simulation, reconstruction and of course data analysis. The talk will review the history of its conception at a time when HEP was moving from the Fortran era to C++. While the original target was a PAW-like system for data analysis, it became rapidly obvious that a more ambitious system had to be developed as a working alternative to the defunct object-oriented data base systems. Thanks to the collaboration of many individuals, ROOT has been gradually extended to include high quality math libraries, statistical analysis tools, visualization tools for statistics objects, detectors and event displays. The current ideas on the evolution of the system will also be presented.

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