

LLVM-based C++ interpreter for ROOT

Thursday, March 26, 2009 4:30 PM (20 minutes)

ROOT is planning to replace a large part of its C++ interpreter CINT. The new implementation will be based on the LLVM compiler infrastructure. LLVM is developed among others by Apple, Adobe, the university of Illinois at Urbana-Champaign; it is open source. Once available, LLVM will offer an ISO compliant C++ parser, a bytecode generator and execution engine, a just-in-time-compiler, and several back-ends that will allow code to be converted into binaries on all major platforms. Compared to CINT we expect improvements in the interpreter's correctness, memory and CPU performance, and multithreading support. In this talk we will present the plans for this endeavor.

Presentation type (oral | poster)

oral

Primary author: NAUMANN, Axel (CERN)

Co-authors: JANYST, Lukasz (CERN); CANAL, Philippe (Fermilab)

Presenter: NAUMANN, Axel (CERN)

Session Classification: Software Components, Tools and Databases

Track Classification: Software Components, Tools and Databases