



SPEAKER: Rene Brun

TITLE: **40 Years of Large Scale Data Analysis in HEP - the HBOOK, PAW and ROOT Story**

DATE: 4 Oct 2017, 16:00

PLACE: 500-1-001 - Main Auditorium

ABSTRACT

The ROOT system is today widely used in many High Energy and Nuclear Physics applications, but also in many other fields of science, engineering and a growing use in many other domains. ROOT provides many libraries for visualization, math and statistics, and also many interfaces to external systems. It includes an advanced I/O system to save and retrieve any objects in an efficient way from local or network-wide data sets. The self describing data sets support reading experimental data objects evolving in time.

ROOT has been continuously developed since 1995 in the same spirit and guidelines of its predecessor PAW. In the talk I plan to discuss not only the technological developments of these two systems, but also the sociological frame, the competition, the international software context with its odd and good aspects accompanying the birth and development of the ROOT system.

René Brun was awarded a special prize of the EPS High Energy and Particle Physics Division in 2017 “for his outstanding and original contributions to the software tools for data management, detector simulation, and analysis that have shaped particle and high energy physics experiments for many decades”.