

Visual Physics Analysis - Applications in High-Energy- and Astroparticle-Physics

Friday 26 February 2010 17:00 (25 minutes)

VISPA (Visual Physics Analysis) is a novel development environment to support physicists in prototyping, execution, and verification of data analysis of any complexity. The key idea of VISPA is developing physics analyses using a combination of graphical and textual programming. In VISPA, a multipurpose window provides visual tools to design and execute modular analyses, create analysis templates, and browse physics event data at different steps of an analysis.

VISPA aims at supporting both experiment independent and experiment specific analysis steps. It is therefore designed as a portable analysis framework, supporting Linux, Windows and MacOS, with its own data format including physics objects and containers, thus allowing easy transport of analyses between different computers. All components of VISPA are designed for easy integration with experiment specific software to enable physics analysis within the same graphical tools.

VISPA has proven to be an easy-to-use and flexible development environment in high energy physics as well as in astroparticle physics analyses. In this talk, we present applications of advanced physics analyses, and thereby explain the underlying software concepts.

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