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## VISPA: a Novel Concept for Visual Physics Analysis

*Tuesday 4 November 2008 14:00 (25 minutes)*

VISPA is a novel graphical development environment for physics analysis, following an experiment-independent approach. It introduces a new way of steering a physics data analysis, combining graphical and textual programming. The purpose is to speed up the design of an analysis, and to facilitate its control.

As the software basis for VISPA the C++ toolkit Physics eXtension Library (PXL) is used which is a successor project of the Physics Analysis eXpert (PAX) package. The most prominent features of this toolkit are the management of relations, a copyable container holding different aspects of physics events, the ability to store arbitrary user data, and a fast I/O.

In order to support modular physics analysis, VISPA provides a module handling system using the above mentioned event container as the interface. Several analysis modules are provided, e.g. a module for automated reconstruction of particle cascades. All modules can be steered through Python scripts. Physicists can easily write their own modules to the module handling system or extend the existing ones.

The concept of VISPA will be presented. Some application examples for different physics analyses will be shown.

**Primary authors:** HINZMANN, Andreas (RWTH-Aachen); MUELLER, Gero (RWTH-Aachen); STEGGMANN, Jan (RWTH-Aachen); ERDMANN, Martin (RWTH-Aachen); KIRSCH, Matthias (RWTH-Aachen); PLUM, Matthias (RWTH-Aachen); ACTIS, Oxana (RWTH-Aachen); FISCHER, Robert (RWTH-Aachen); KLIMKOVICH, Tatsiana (RWTH-Aachen)

**Presenter:** KLIMKOVICH, Tatsiana (RWTH-Aachen)

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