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EDM4hep - a common event data model for HEP experiments

Saturday, 9 July 2022 09:15 (15 minutes)

A shared, common event data model, EDM4hep, is an integral part of the Key4hep project. EDM4hep aims to be usable by all future collider projects, despite their different collision environments and the different detector technologies that are under discussion. This constitutes a major challenge that EDM4hep addresses by using podio, a C++ toolkit for the creation and handling of event data models, developed in the context of the AIDA R&D program. This approach allows for quick prototyping of new data types and provides a streamlined framework for updates. After presenting an overview of the basic features of EDM4hep and podio, we will discuss the current experience with an initial version of EDM4hep in different physics studies. Additionally, we will present the planned developments that are necessary for a first stable version of EDM4hep, addressing in particular backward compatibility aspects and schema evolution. We will conclude with an outlook on the future developments directions beyond this first stable version.

In-person participation

Yes

Primary authors: FERNANDEZ DECLARA, Placido (CERN); GAEDE, Frank (DESY); GANIS, Gerardo (CERN); HEGNER, Benedikt (CERN); HELSENS, Clement (KIT); MADLENER, Thomas (DESY); SAILER, Andre; STEWART, Graeme A (CERN); VOLKL, Valentin (CERN)

Presenter: GAEDE, Frank (DESY)

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