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EDM4hep - The common event data model for the Key4hep project

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The common and shared event data model EDM4hep is a core part of the Key4hep project. It is the component that is used to not only exchange data between the different software pieces, but it also serves as a common language for all the components that belong to Key4hep. Since it is such a central piece, EDM4hep has to offer an efficient implementation. On the other hand, EDM4hep has to be flexible enough in order to allow for new developments in detector technology and reconstruction. In order to meet these challenges EDM4hep is using the podio EDM toolkit to generate its implementation from a high level description.

In this talk we give an overview of EDM4hep emphasizing the most recent developments that were tackled on the way to a first stable release. We use this opportunity to also highlight the latest developments in the podio toolkit that were required by the latest EDM4hep features. These include the introduction of type erased interface types, and a new generic RDataSource to support the full data model API in RDataFrame.

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