



Contribution ID: 14

Type: **Oral**

GENFIT - a Generic Track-Fitting Toolkit

Tuesday 2 September 2014 16:10 (25 minutes)

Genfit is an experiment-independent track-fitting toolkit, which combines fitting algorithms, track representations, and measurement geometries into a modular framework. We report on a significantly improved version of Genfit, based on experience gained in the Belle II, PANDA, and FOPI experiments. Improvements concern the implementation of additional track-fitting algorithms, enhanced implementations of Kalman fitters, enhanced visualization capabilities, and additional implementations of measurement types suited for various kinds of tracking detectors. The data model has been revised, allowing for efficient track merging, smoothing, residual calculation and alignment.

Summary

Genfit is an experiment-independent track-fitting toolkit, which combines fitting algorithms, track representations, and measurement geometries into a modular framework. We report on a significantly improved version of Genfit, based on experience gained in the Belle II, PANDA, and FOPI experiments. Improvements concern the implementation of additional track-fitting algorithms, enhanced implementations of Kalman fitters, enhanced visualization capabilities, and additional implementations of measurement types suited for various kinds of tracking detectors. The data model has been revised, allowing for efficient track merging, smoothing, residual calculation and alignment.

Primary authors: RAUCH, Johannes (T); SCHLUETER, Tobias (Theoretische Physik-Fakultaet fuer Physik-Ludwig-Maximilians-Uni)

Presenter: RAUCH, Johannes (T)

Session Classification: Data Analysis - Algorithms and Tools

Track Classification: Data Analysis - Algorithms and Tools