

Rediscovering Geane in the VMC as track follower for FairROOT

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Geane is a tool to calculate extrapolated track parameters and propagated errors through dense materials. It was written in Fortran 15 years ago and still today is successfully used by many experiments in connection with Geant3.

The VMC concept of ROOT is the ideal method to preserve this knowledge and to make it available, with an updated version, to ROOT based experiments that can use it in a straightforward way with the ROOT geometry modeler.

The talk will show how the TGeant3 interface has been extended for the FairROOT framework developed at GSI (see talk by M. Al-Turany) to allow the use of Geane in the context of the modern VMC approach. It will also report the experience of the PANDA collaboration regarding its use for the Kalman filter currently in development for the global reconstruction.

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