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The ROOT geometry package is a tool designed for building, browsing, tracking and visualizing a detector geometry. The code is independent from other external MC for simulation, therefore it does not contain any constraints related to physics. However, the package defines a number of hooks for tracking, such as media, materials, magnetic field or track state flags, in order to allow interfacing to tracking MC's. The final goal is to be able to use the same geometry for several purposes, such as tracking, reconstruction or visualization, taking advantage of the ROOT features related to bookkeeping, I/O, histogramming, browsing and GUI's.

In this poster, we will show the various graphics tools to render complex geometries, from ray tracing tools that have the advantage to test the real geometry like when tracking particles, to sophisticated 3-D dynamic graphics with the OpenGL, X3D, Coin3D or OpenInventor viewers. An abstract interface has been defined and it is common to all the viewers.

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