

Phoenix event display for ILD

The FTX Software (SFT) group is actively involved in the Key4hep project, which aims to develop common software for future collider projects. One of the core responsibilities of the group in this context is the migration of existing workflows for the International Large Detector (ILD) concept to Key4hep based software. An event display is a tool that allows physicists to view the generated and reconstructed particles and hits inside the detector geometry and it is extremely useful for debugging e.g. reconstruction algorithms or to simply visualize a specific event.

ILD has an existing, but hard to maintain event display, for which we would like to find a replacement. The Phoenix event display framework allows to run an event display in a browser and is already used by ATLAS, LHCb and some detector concepts for the Future Circular Collider FCC). The goal of this summerstudent project is to develop a first version of an ILD event display within the Phoenix framework and to compare its functionality to the existing one. This is an ideal project for students who have some experience in programming already and that want to extend their experience towards web development and related tools.

Group

FH - FTX

Project Category

B5. Computing

Special Qualifications

Ideally some experience with JavaScript or TypeScript but not strictly necessary if some experience in other programming language(s) exists.

Primary authors: GAEDE, Frank (FTX (FTX Fachgruppe SFT)); MADLENER, Thomas (FTX (FTX Fachgruppe SFT))