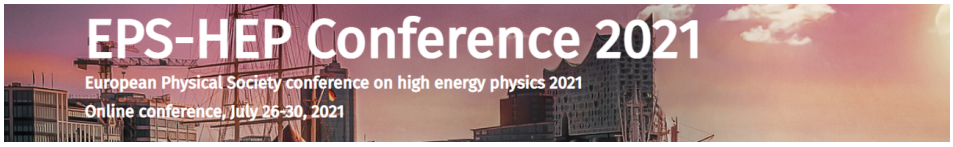


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# FCCSW and Key4hep : status and plans

The Future Circular Collider (FCC) is designed to provide unprecedented luminosity and centre-of-mass energies. The physics reach and potential of the different FCC options $e^+e^-$, $pp$, $ep$, is studied with a dedicated software framework, FCCSW, which has been developed and used for the studies published in dedicated Conceptual Design Reports (CDRs) at the end of 2018. Since then a new study phase has started in view of the next European Strategy Update, focusing in particular on detector concept optimisation for the electron-positron machine. On the software-side, this new phase coincided with the start of the common software project Key4hep, of which the FCC community is part and customer.
The Key4hep project provides a framework, an event data model (EDM4hep) and a set of optimised tools to support the software needs of experiments, in particular in terms of detector optimizations and physics performance. Non FCC-specific parts of FCCSW, including a framework to analyse EDM4hep output using ROOT dataframes, have been or will be migrated to Key4hep and the rest re-based to adapt to the new environment. In this contribution we will present the current status of this migration process and the overall experience so far. We will also discuss future development plans to optimally support the physics potential studies for FCCee.

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## Collaboration / Activity

FCC

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