Contribution ID: **490** Type: **Presentation**

Common Turnkey Software Stack

Wednesday 26 June 2019 13:45 (25 minutes)

Future HEP experiments require detailed simulation and advanced reconstruction algorithms to explore the physics reach of their proposed machines and to design, optimise, and study the detector geometry and performance. To synergise the development software efforts, the CERN EP R&D road map proposes the creation of a "Turnkey Software Stack", which is foreseen to provide all the necessary ingredients, from simulation to analysis, for future experiments, including FCC. The software stack will facilitate writing specific software for experiments ensuring coherency and maximising re-use of established packages to benefit from existing solutions and community developments, for example, ROOT, Geant4, DD4hep, Gaudi and PODIO.

The current status and plans of the turnkey software stack will be presented and details of the plans for future developments to generalise the applicability to FCC-ee and beyond.

Author: STEWART, Graeme A (CERN)

Presenter: STEWART, Graeme A (CERN)

Session Classification: FCC physics, experiments & detectors

Track Classification: Common detector technologies and offline software