News - Physics Performance, Apr 19, 2021

P. Azzi (INFN - PD), E. Perez (CERN)

News from Software meeting

- IDEA and Edm4Hep (Lia Lavezzi)
 - Work in progress for definition of "hit objects" in EDM4Hep to comply with drift chamber and dual readout calorimeter needs
 - Work in progress for writing out the track information from the drift Chamber FullSim standalone reconstruction in the EDM4HEP format

- Jet clustering interface in FCCAnalyses & Btagging
 - Simple methods using the MC-truth associations and Delphes parameterization at the level of FCCAnalysis (i.e. on reclustered jet) being tested (Julie Munch)
 - For all technical questions please use the FCC Sowftware Forum here: <u>https://fccsw-forum.web.cern.ch/</u>
 - New category add for FCCAnalysis issues

New activities starting up

- New contributors from UniGeneva joining in
 - Interest in the LLP, HNL topic. Meeting next week
- AIDA Kickoff last week (see here <u>https://indico.cern.ch/event/1003419/contributions/4273254/</u>)
 - Activities of WG12 very relevant for us. Several people in this group and in FCC software involved with different roles.
 - one task WG12.5 "Particle Flow reconstruction" in particular includes a contribution on the implementation Pflow using ML in the Pandora framework for the IDEA detector (collaboration lead by Roma3, B. Di Micco, with Sussex (I. Vivarelli), Padova (P. A.) and CERN (S. Vallecorsa))

- Summer conferences coming up:
 - we should prepare abstract related to case studies that are becoming mature
 - Approved plots:
 - would like to have some discussion about the material that will be presented at Conferences, since we are far from "complete analyses" but it is good to be able to show the work in progress.
 - it's not the case yet of having formal approvals, but it could be useful to come up with a specific set of plots & numbers for everyone to use. To avoid contradiction or confusion
 - Material for the FCC Week can be used as a starting point

15:00 → 15:10	News / welcome Speakers: Emmanuel Francois Perez (CERN) , Patrizia Azzi (INFN Padova (IT))	©10m 🖉 •
15:10 → 15:40	Analysis of Bc / B+ to tau nu Speaker: Clement Helsens (CERN)	© 30m 🖉 -
15:40 → 16:00	Resolutions of displaced vertices for several configurations of the beam-pipe and VXD detector Speaker: Donal Hill (EPFL - Ecole Polytechnique Federale Lausanne (CH))	©20m 🖉 ▪
16:00 → 16:20	Update on fits to the Higgs recoil mass Speaker: Ang Li (APC Paris)	©20m 🖉 ▪

Next meeting: Monday, May 17 2021