

FCC SW

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FCC SW Meeting, 26 February 2021

What happened since last meeting

Key4hep / EDM4hep

- Activity in the last two weeks
 - Edm4hep->Icio in flight conversion
- Preparation of contributions to vCHEP2021
 - On Key4hep and EDM4hep/Podio

Next meetings: Mar 2nd (Key4hep), Mar 9th (EDM4hep)

- Register to egroups **hsf-edm4hep-wg** and/or **key4hep-sw**

Recent activities

- Topical meeting on vertexing

- Jointly with Physics Performance
- On 10 February 2021: <https://indico.cern.ch/event/1003610/>
- Goal: summarize current results / status and organize the next steps
- Good attendance and discussion atmosphere
- Good progress after the meeting! (next slide)
- See detailed summary given by C Helsens at the [General FCC Physics Meeting](#), last Monday

- AoB

- Distributed computing
 - Activation of FCC VO at CERN in progress
 - Will enable processing through (ILC)DIRAC

Progress after the vertexing meeting

- New Delphes tag: v3.4.3pre09
 - Fixes issue with missing off-diagonal terms in the track cov matrix
 - Available on Spack build (and LCG nightlies)
- Converter EDM4hep to/from LCIO
 - Required to run Marlin algorithms, e.g. LCFI+
 - EDM4hep → LCIO: available as [PR](#)
 - LCIO → EDM4hep: discussion started; possible use of k4LCIOReader
- Initial integration of Acts vertexing (k4ActsVertexing)
 - Experimental but can be used in FCCAnalysis for primary vertices
 - Opens up several options for Detached Vertices
 - Need to define / implement logic
- DecayTreeFitter (BaBar, LHCb, Belle2, ...)
 - Implementation plan sketched
 - Start for LHCb implementation (in Gaudi context)
 - Possible interplay with Acts

Today's meeting

Status of things

- Improvement of the Pythia8-EvtGen interplay, M Chrzęszcz

Next meetings ([Indico category](#))

- [Mar 12th](#)
 - Following tentative dates: [Mar 26th](#), [Apr 16th](#)
- Suggestion for discussion topics for next meetings are welcome

Minutes of the meeting attached to the agenda pages