

# News - Physics Performance, May 17, 2021

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## Monte-Carlo samples: “Spring2021” campaign

- Goal: EDM4HEP samples for the analyses targeting this summer
- Release from 2021-04-30, uses Delphes 3.4.3pre10. Relies on the EventProducer from Clement Helsens. Samples in EOS.
- Main changes compared to the samples of end of 2020:
  - Beam-energy spread is included
  - bugfix of the MC-associations for electrons
  - beam-pipe model updated
  - better resolution for (slightly) displaced tracks; the error matrix of the track parameters now include also the off-diagonal terms
- Samples correspond to IDEA simulation; a few alternative samples (IDEA with 3T at 240 GeV, CLD tracker) produced too.
- On-going list of samples: [http://fcc-physics-events.web.cern.ch/fcc-physics-events/Delphesevents\\_spring2021\\_IDEA.php](http://fcc-physics-events.web.cern.ch/fcc-physics-events/Delphesevents_spring2021_IDEA.php)
- Configuration cards: see the [FCC-configs repository](#), branch **spring2021**.

## FCC Software forum

- Good to see increasing activity on this forum
- Continue to use it for all technical questions, in particular related to FCCAnalyses
- URL: <https://fccsw-forum.web.cern.ch/>

## Announcements & coming events

- ECFA workshops on e+e- Higgs/EW/Top factory
  - Kick-off meeting (online): June 18
  - <https://indico.cern.ch/event/1033941/>
- FCC week (online): June 28 – July 2
  - <https://indico.cern.ch/event/995850/>
  - Detailed agenda is in preparation. Probably a short session with a few reports on well advanced analyses.
- Next FCC France workshop (Annecy): Nov 30 – Dec 2
- Conference page – thanks to the Speaker Büro !
  - <https://fcc-ee-conference.web.cern.ch/>
  - Former talks, abstracts submitted to summer conferences

# Today's agenda and next meeting

**15:00** → 15:10 **News / welcome**

**Speakers:** Emmanuel Francois Perez (CERN) , Patrizia Azzi (INFN Padova (IT))

**15:10** → 15:30 **Updates on the Bc / B+ to tau nu analysis ¶**

**Speakers:** Clement Helsen (CERN) , Donal Hill (EPFL - Ecole Polytechnique Federale Lausanne (CH))

**15:30** → 15:50 **Searches for new scalars (using the recoil mass in Z+S events)**

**Speakers:** Markus Klute (Massachusetts Inst. of Technology (US)) , Tianyu Justin Yang (Massachusetts Inst. of Technology (US))

**15:50** → 16:10 **Update on jet studies**

**Speakers:** Julie Munch Torndal (CERN) , Julie Munch Torndal (University of Copenhagen (DK))

Next meeting (t.b.c.) : Monday, June 21, 2021