

Status of Segmented Crystal ECAL Simulation

Flavia Cetorelli^{2,3}, Wonyong Chung⁴, Marco Lucchini^{1,2}, Chris Tully⁴

1. Università degli Studi di Milano – Bicocca
2. INFN Milano-Bicocca
3. CERN
4. Princeton University

- Reconstruction in progress – see [slides](#) by Flavia at last week’s FCC full sim meeting (<https://indico.cern.ch/event/1340540/>)
- Preparing for merge into key4hep geometry repo (“k4geo”) (<https://github.com/key4hep/k4geo/tree/master/FCCee>)
- IDEA full simulation prep:
 - Decision made on collective (tracker, ECAL, HCAL) migration to ddsim (instead of k4SimGeant4)
 - Technical note documenting IDEA full simulation in progress
- IDEA w/ crystal option added to FCC-ee detector full sim website (https://fcc-ee-detector-full-sim.docs.cern.ch/IDEA/IDEA_crystals/)
- May be first FCC-ee specific detector full sim
 - Others:
 - ALLEGRO – noble liquid ECAL, iron/scint HCAL, same drift chamber as IDEA
 - CLD – from CLIC – SiW ECAL, steel/scint HCAL, silicon tracker