

Updates from calorimeter system

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HCAL

- **A new fellow in the team: Coralie Neubüser**
- **HCAL geometry: ATLAS-like structure (Fe + scintillator)**
- **First goal**
 - Try to make the HCAL more dense, without losing too much in the energy resolution
 - Different thicknesses of absorber: 5 mm → 7 or 9 mm
- **Started with Geant4 standalone code (from C. Solans)**
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- **Plan to move to the FCC official SW**
 - Validation of the HCAL geometry
 - Implementation of more realistic simulations (cells, noise, ...)
 - Tools developed for ECAL could hopefully be easily adapted

ECAL

- **Anna Zaborowska joined the effort**
- **Work on the calorimeter reconstruction SW**
 - Noise tool using constants extracted from ATLAS prepared
 - First version of the clustering algorithm (sliding window) ready
- **Validation of the code is ongoing**
- **Fast simulations of ECAL (GFlash) in FCC SW**
 - Optimization of parametrization based on full simulation in progress
- **Production of single particles with new geometry started**
 - Using Condor batch system (very fast!)
 - Files with hits to be used for the reconstruction
- **Plans**
 - Performance of the clustering algorithm with the realistic noise

