

Plans for FCC week

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Aims

➤ Extrapolation Tracker+**Calorimeter**+Muon system

=> Need to implement calorimeter description

Study

➤ Hit distances on layers

➤ Channel occupancy per Layer

➤ Cluster occupancy

– cluster sizes

– probability of cluster merging

– jet resolution (back propagation of jet axis from calorimeter)

=> Need digitization

Geometric digitization in FCCSW status

- Starting from digitization in ACTS
 - reads in `fcc::DigiTrackHitAssociation`
 - writes out `fcc::TrackCluster`
 - Geant4 produces makes many steps in sensitive volume
 - Implemented merging of steps to hit
 - FCChh has dense environment
 - Implemented clusterization using connected components algorithm
- => Currently testing**

Magnetic field in FCCSW status

IBFieldSvc Interface

- ConstantBFieldSvc
- InterpolatedBFieldSvc
 - Read in Bfield map in root/csv
 - Put FCC current bfield map in root/csv to eos

=> **Tested & running**

- Geant4 Wrapper

=> **Needs testing** (Consistency test against plain implementation)