Hands-on notes - Day 3

Intro

Today we start from [Sect 3.1 in the FCC Starter Kit](#).
Please make sure you have a shell setup as explained yesterday; in particular that 'fccrun' is defined:

$ source /cvmfs/fcc.cern.ch/sw/latest/setup.sh
$ which fccrun

Should produce the installation location. If nothing, the software has not been properly set up.

$ fccrun -h

Should produce the help of fccrun, with arguments available from command lines

FCC Calorimeter performance studies workflow

$ mkdir mytutorial; cd mytutorial

The geometry is described with DD4hep

We need the file *dumpGeo_fccee.py* .
Other geometries are available at https://github.com/HEP-FCC/FCCSW/tree/master/Detector .

If you get an error, please try with the equivalent LCG build:

$ source /cvmfs/fcc.cern.ch/sw/latest/setup-lcg.sh

from a **fresh shell** .

To display the geometry with ROOT save into a script display_with_root.py and run

$ python -i display_with_root.py

Geant simulation

We run particle gun:

$ fccrun $FCCSWBASEDIR/share/FCCSW/RecFCCeeCalorimeter/options/runCaloSim.py --filename fccee_idea_LAr_pgun.root -n 500

(it takes a while).

Writing a Gaudi Algorithm

Templates

```
$ git clone https://github.com/key4hep/k4-project-template
```

$ ./run fccrun ../K4TestFWCore/options/createExampleEventData.py