Hands-On Session 1

Code without Solution: hands-on-1.tar.gz

Code with Solution: hands-on-1-solution.tar.gz

Exercise 1

- Geant4 is already installed on the machines in the directory **/opt**

- We will call the Geant4 script to define the environment needed to run Geant4 applicatons:

  . /opt/geant4.10.02.p02/bin/geant4.sh [sh]

  source /opt/geant4.10.02.p02/bin/geant4.csh [csh]

- Build and run the example:

  - Download the example source code (without solution)

  - **tar -xvf hands-on-1.tar.gz**

  - Follow the instructions at the [Geant4 examples website](#) on how to build and run the example

- Get familiar wih the provided code

  - You can skip **EDDetectorConstruction.cc** and **EDPrimaryGeneratorAction.cc** which will be explored later

- Get familiar with Geant4 Qt User Interface

  - Use the provided button (an arrow in a green circle) to run 1 event, observe the picture and the output in the Output window.

  - Run 1 event from the command line. You have to type this command in the Session window:

    /run/beamOn 1

  - Run 1 event via a selection of the command from the Help menu.

  - Set tracking verbose level to 1 and observe the output:

    /tracking/verbose 1

- Add printing of the event number at the begin of event and another printing about the end of event in **EDEventAction**

  - See **G4Event** class functions at the Geant4 documentation