Hands-On Session 4

Code without Solution: hands-on-4.tar.gz

Code with Solution: hands-on-4-solution.tar.gz

Exercise 4

Part A

- Explore processes defined for proton, e-, e+, gamma particles via UI commands and add these commands in run.mac
- Add a command line option to select any Geant4 physics list using **G4PhysListFactory** class The command line options were already added in the **main()** function. See the documentation for the basic example B4, where use of a similar code is described in the section **How to run**
  - Check availability of the physics list via

```
G4bool G4PhysListFactory::IsReferencePhysList(const G4String& physListName);
```

Part B

- Set particles production thresholds (cuts) via Geant4 command in **run.mac**
  - Use Help in Qt session to find out needed commands
  - See **setCut*** commands in **/run** directory
  - Define a region in EM calorimeter with production thresholds different from the default ones.