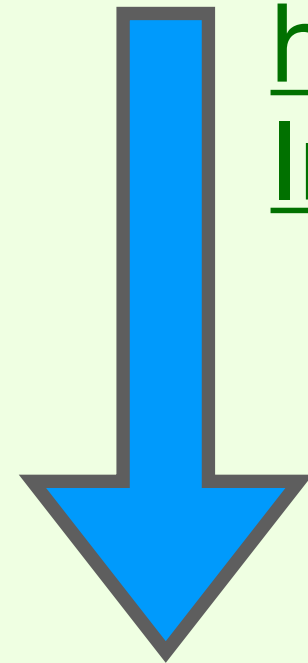


Simulation code structure

Particle Generation in Fun4All (Fun4All_physiTuto.C):

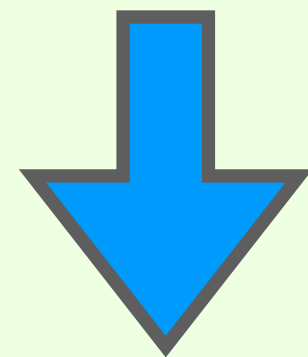
https://github.com/sPHENIX-Collaboration/INTT/blob/main/general_codes/tkumaoka/InttSeedingTrackDev/ParticleGen/macro/Fun4All_physiTuto.C



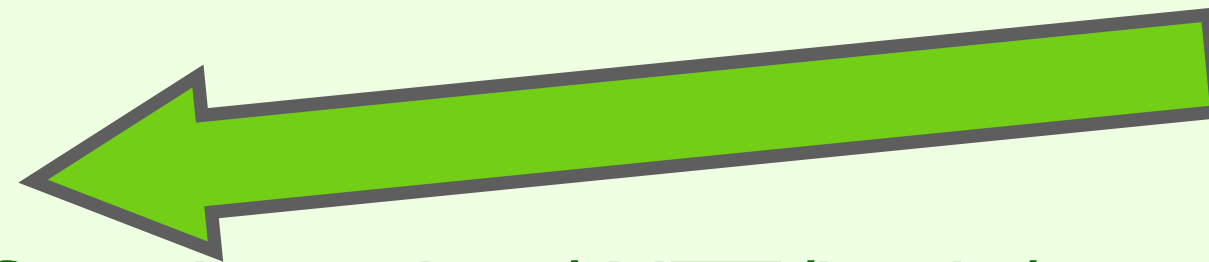
root file including DST clusters

Tracking Performance:

https://github.com/sPHENIX-Collaboration/INTT/blob/main/general_codes/tkumaoka/InttSeedingTrackDev/InttSeedTrackPerformance/src/InttSeedTrackPerformance.cxx



root file: Performance histograms



INTT Seeding Tracking :

https://github.com/sPHENIX-Collaboration/INTT/blob/main/general_codes/tkumaoka/InttSeedingTrackDev/InttSeedTrackPerformance/src/InttSeedTracking.cxx

How to Run the Particle Generation Simulation

Particle simulation

https://github.com/sPHENIX-Collaboration/INTT/tree/main/general_codes/tkumaoka/InttSeedingTrackDev/ParticleGen

```
mv physiTuto/build
source /opt/sphenix/core/bin/sphenix_setup.sh
make clean
source /opt/sphenix/core/bin/sphenix_setup.sh
../autogen.sh --prefix=$PWD/../install
make install
make
source /opt/sphenix/core/bin/setup_local.sh ${PWD}/../install
export ROOT_INCLUDE_PATH=/sphenix/tg/tg01/commissioning/INTT/repositories/
macros/common:${ROOT_INCLUDE_PATH}
cd ../../macro
root -q -b 'Fun4All_physiTuto.C(10, 1, 0.2, "Electron", "<outputDir>", "output.root")'
```

You can find my single electron output examples (but these are heavy, so please take care, if you copy them).

/sphenix/tg/tg01/commissioning/INTT/work/tkumaoka/InttSeedingTrackDev/ParticleGen/output/singleE*MeVEta0.root

How to Run the Tracking Performance Estimation Code

Tracking Performance Code

https://github.com/sPHENIX-Collaboration/INTT/tree/main/general_codes/tkumaoka/InttSeedingTrackDev/InttSeedTrackPerformance

Only type one line

```
source main.sh 0
```

However, you need to setup the input root file and output directory in main.C

This code does not require the Fun4All environment, so you can run it in your laptop.