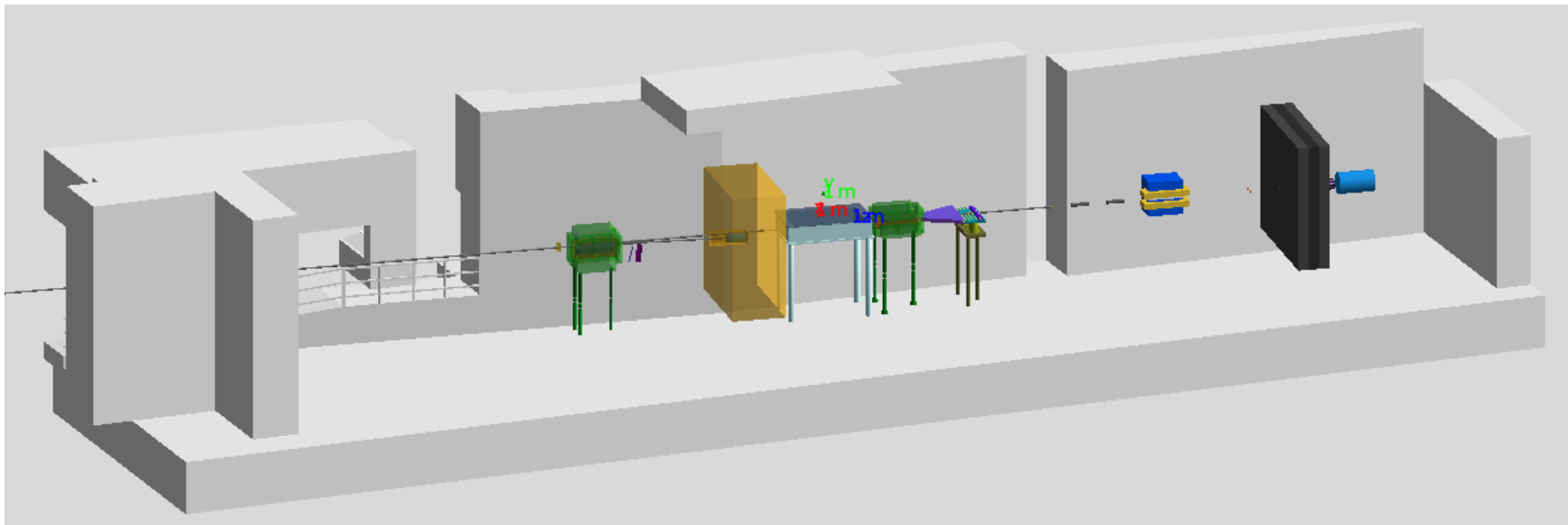
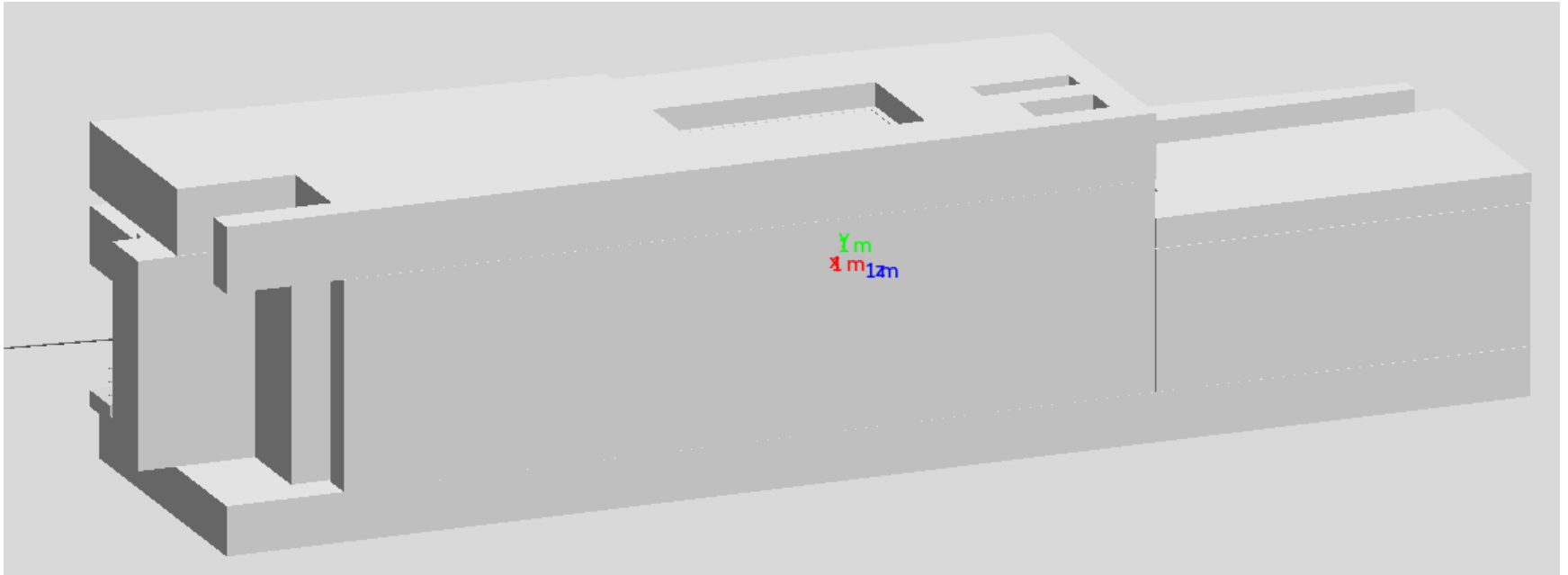


Update on LUXE GEANT4 Geometry

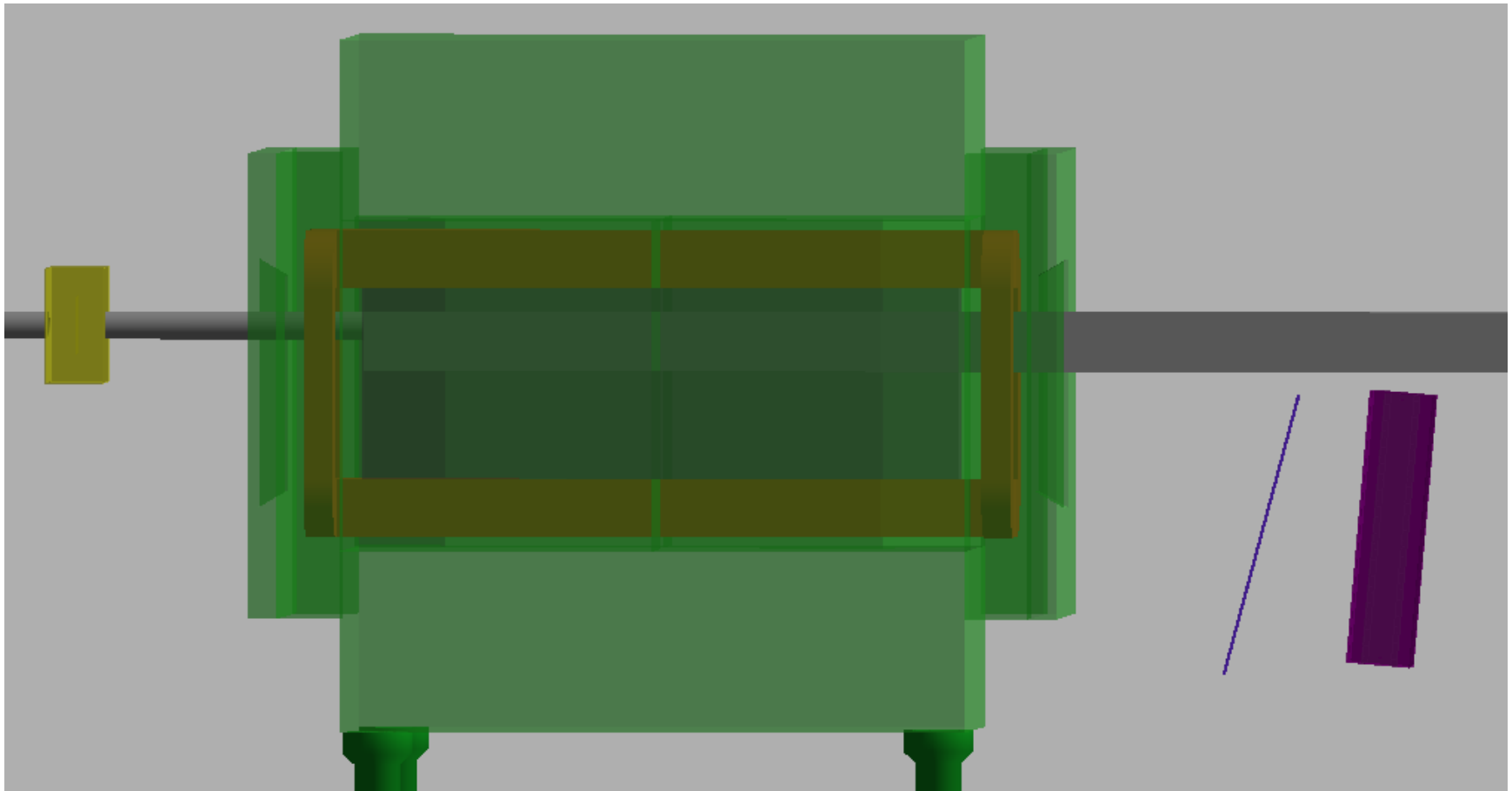
Oleksandr Borysov

LUXE Meeting
August 13, 2020

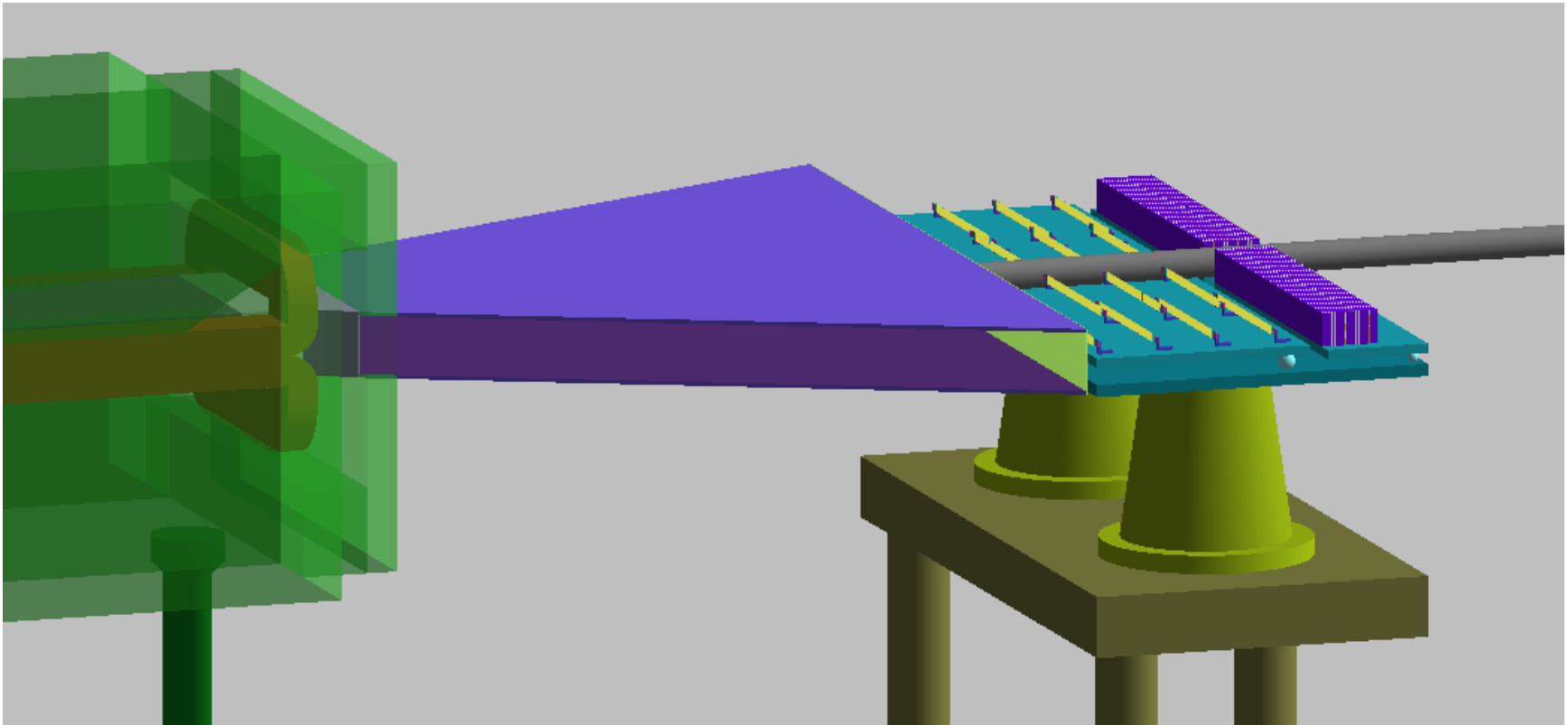
Infrastructure



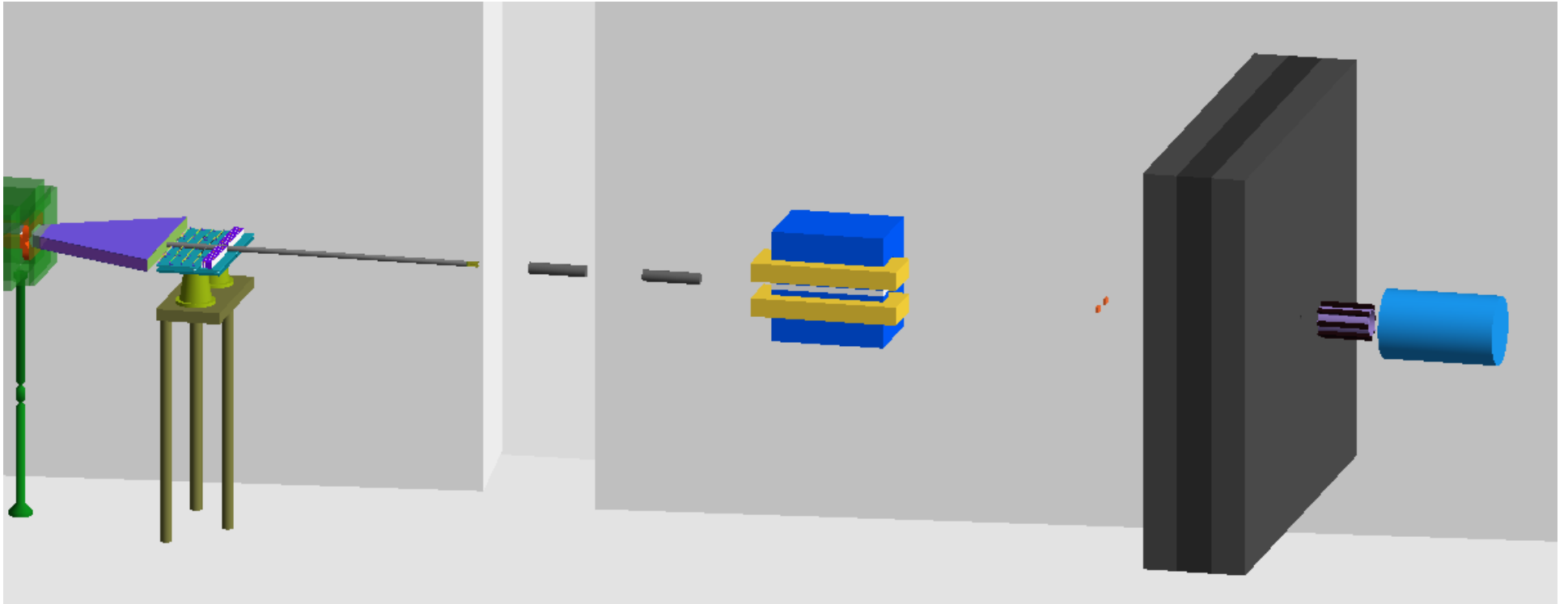
Bremsstrahlung



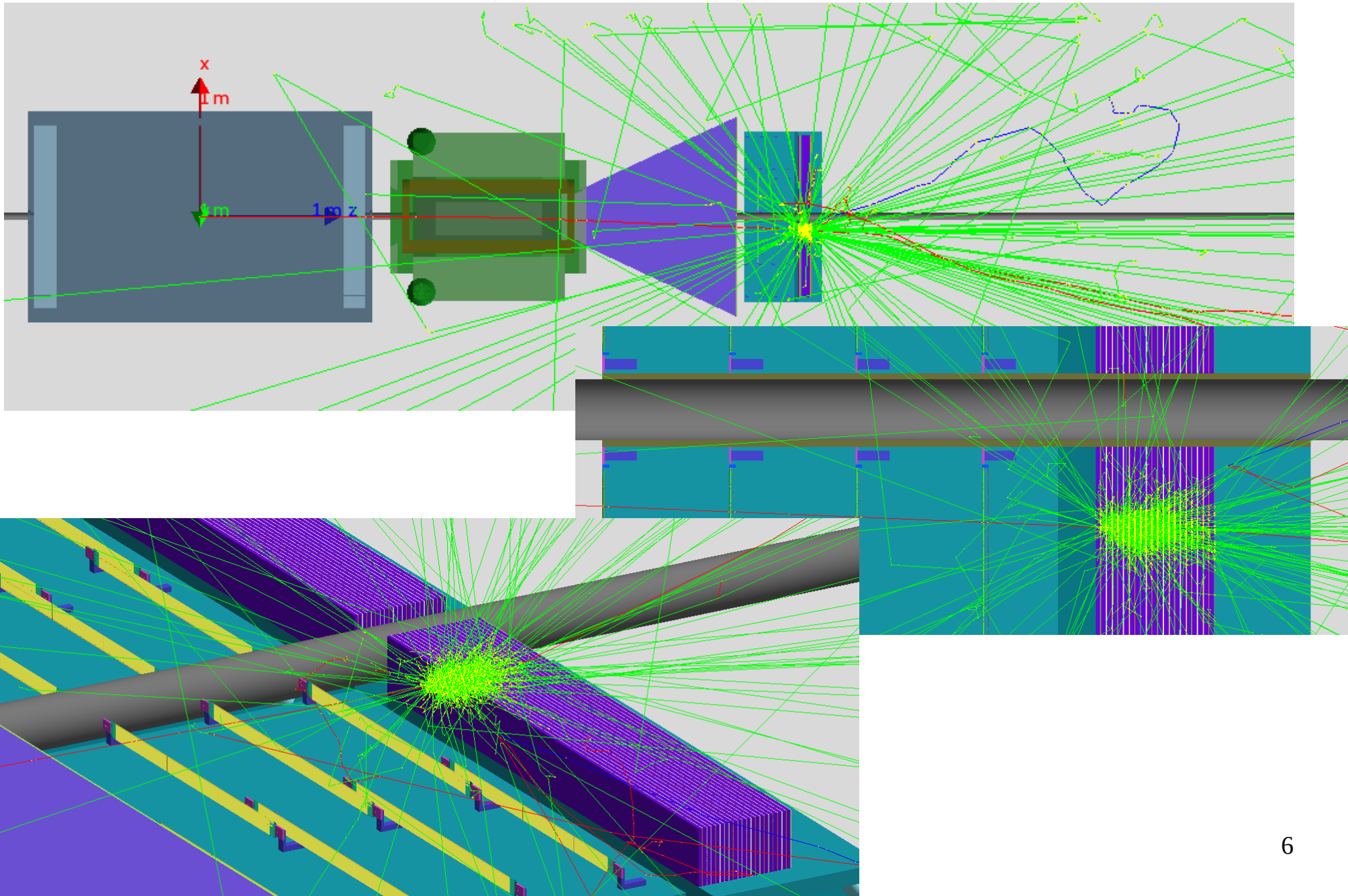
BPPP



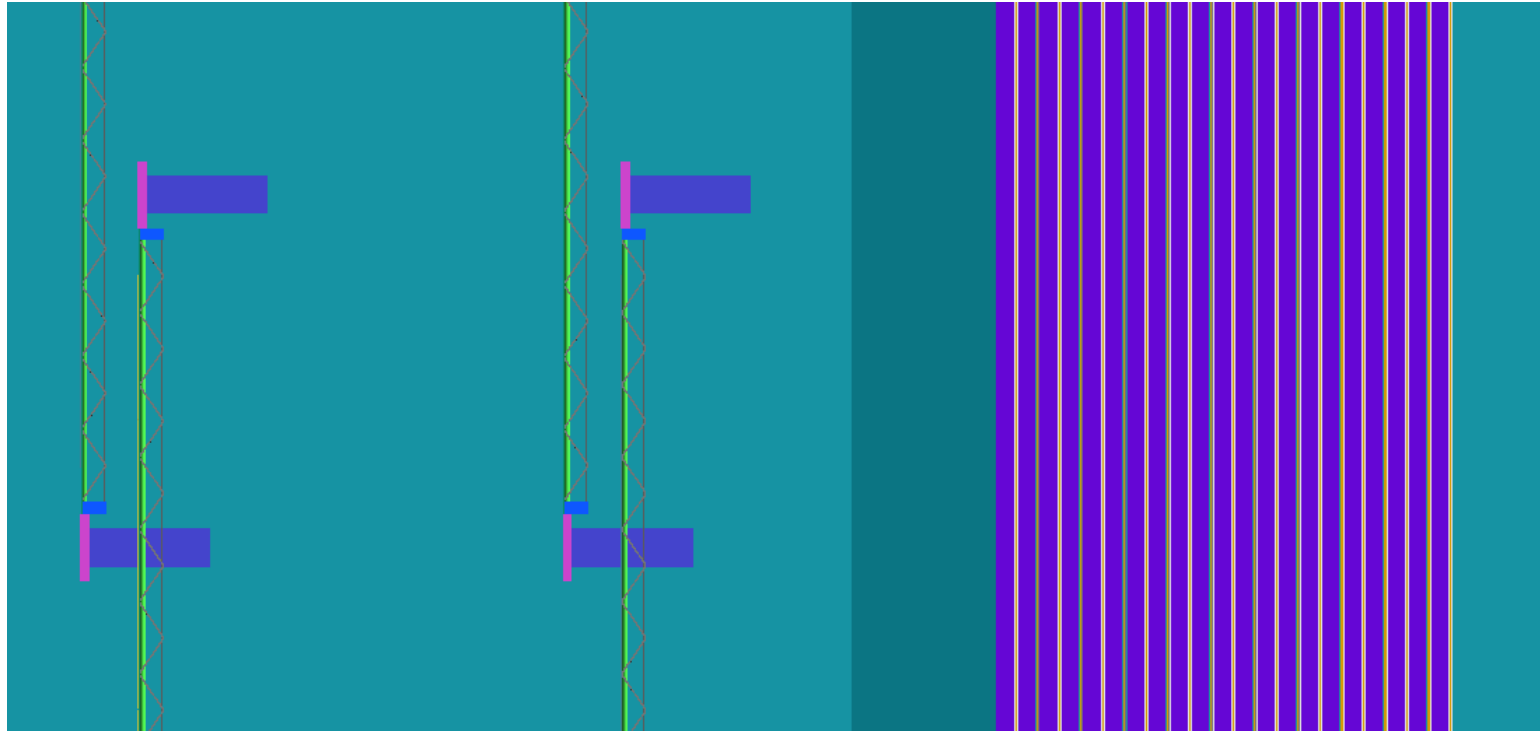
Gamma spectrometer



e- 12.5 GeV



ECal implementation



Absorber

Tungsten alloy:

- W : 93%
- Ni : 5.25%
- Cu : 1.25%

Fanout and HV Kapton:
mixture of

- Kapton,
- epoxy,
- Cu.

Fractions are proportional
to layers thickness.

Silicon sensor:
Si 320 um.

Air gap

Running Environment

Environment on NAF (or wherever CVMFS is available), Geant4 v 10.06:

```
./cvmfs/sft.cern.ch/lcg/releases/LCG_97/Geant4/10.06.p01/x86_64-centos7-gcc8-opt/Geant4-env.sh  
./cvmfs/sft.cern.ch/lcg/releases/LCG_97/Geant4/10.06.p01/x86_64-centos7-gcc8-opt/bin/geant4.sh  
# use cmake /cvmfs/sft.cern.ch/lcg/releases/LCG_97/CMake/3.14.3/x86_64-centos7-gcc8-opt/bin/cmake
```