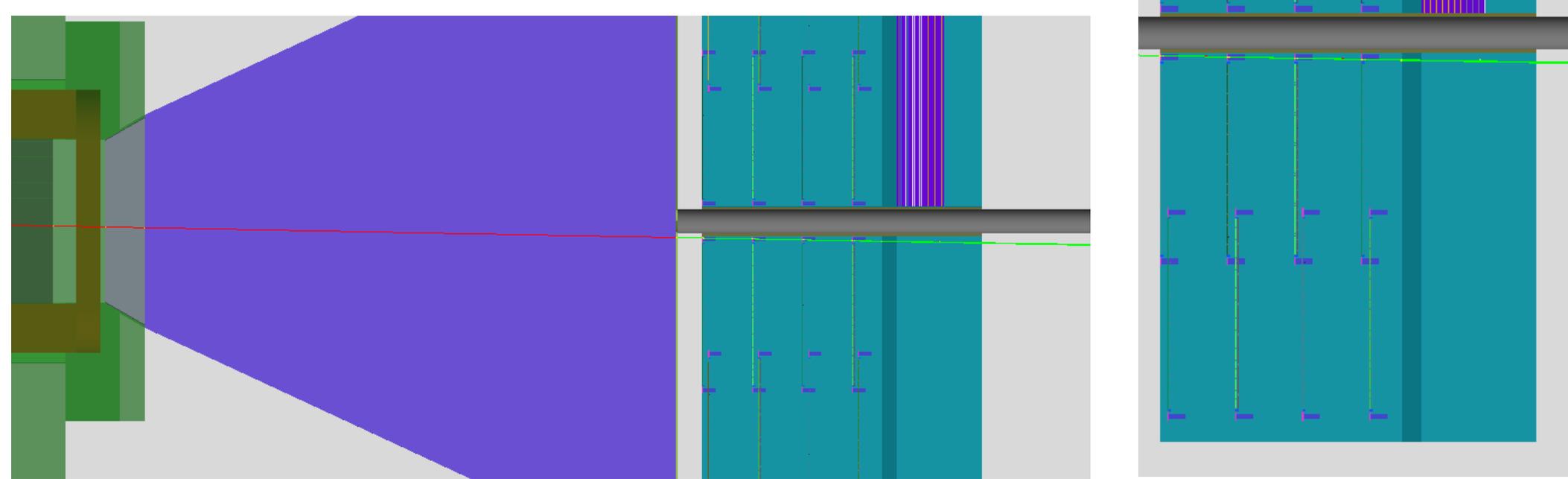


# Update on LUXE GEANT4 Geometry.

Position of Scintillator Screen  
and Cherenkov Detector in HICS Setup

Oleksandr Borysov

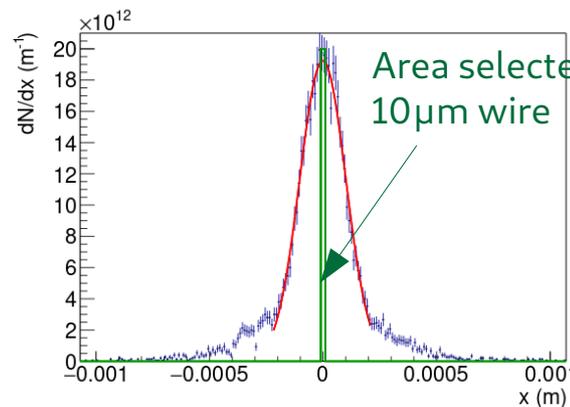
# Electron X distribution at a possible location of Cherenkov detector



E (GeV)	X (mm)	dX (mm)
16.5	41.22	0
15	45.35	4.12
14	48.59	7.36
13	52.33	11.10
12	56.69	15.47
11	61.85	20.62
10	68.03	26.81

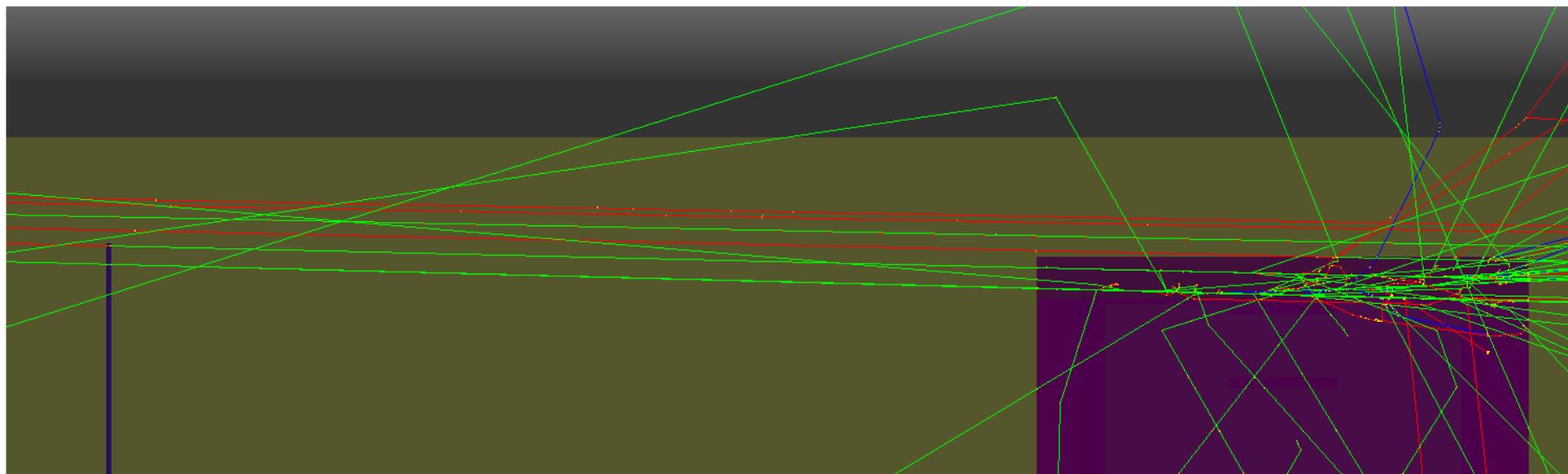
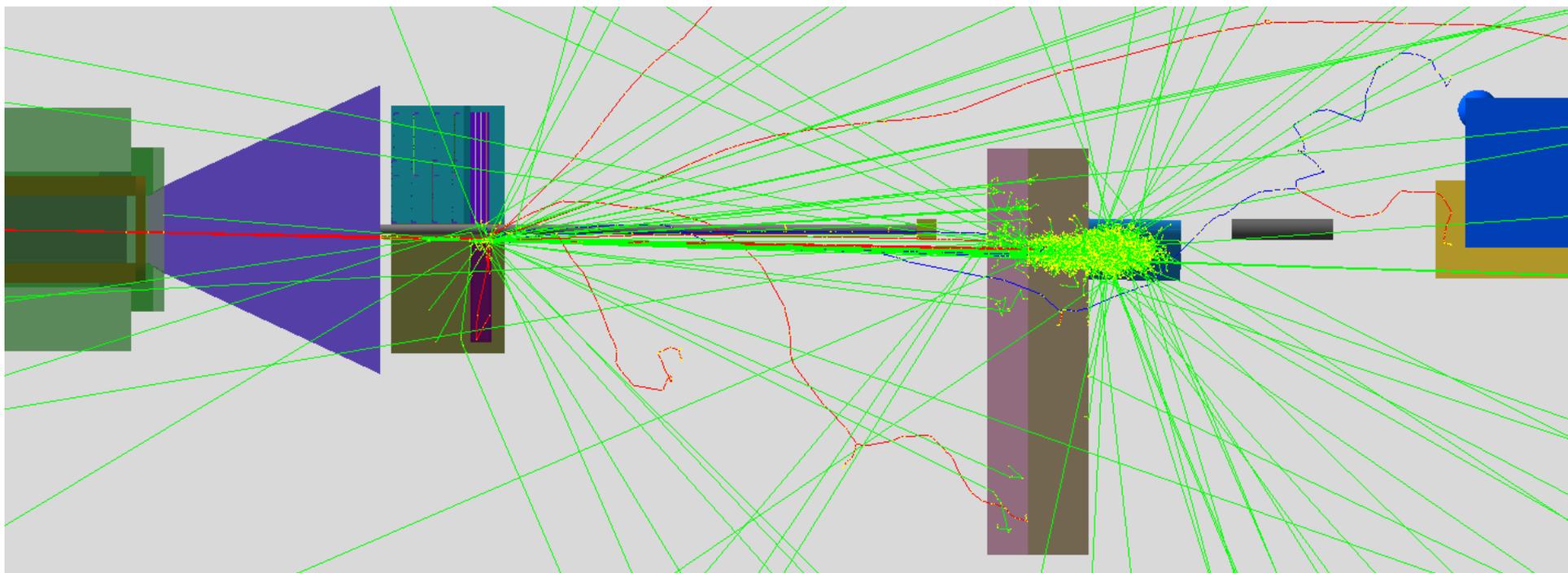
HICSScintillatorXPos = 47 \*mm;  
 // Displacement at 1.49 m from the 1T magnet (m): 0.0374821

HICSCherenkovXPos = 50 \*mm;  
 // Displacement at 1.69 m from the 1T magnet (m): 0.041222



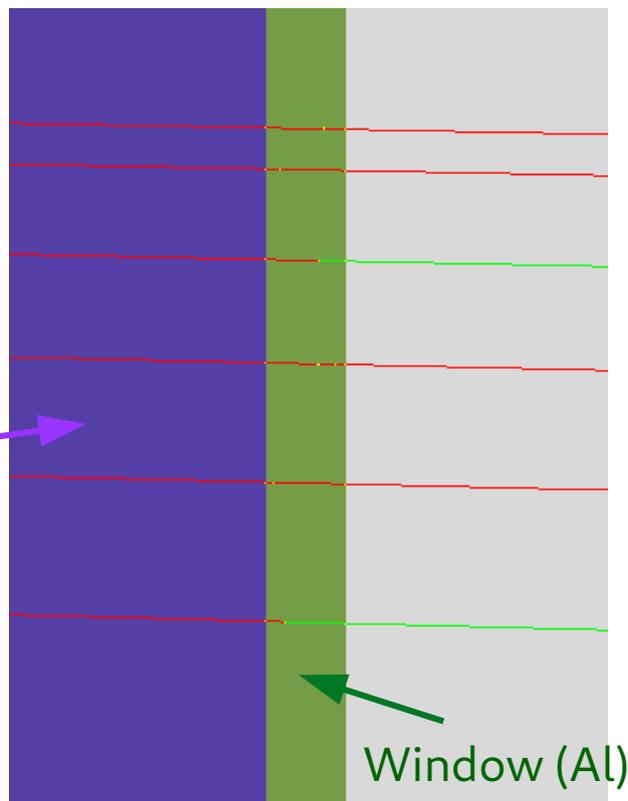
Projected 1D photon distribution 10m from IP.

Electrons (GeV): 16.5, 16, 15, 14, 13, 12

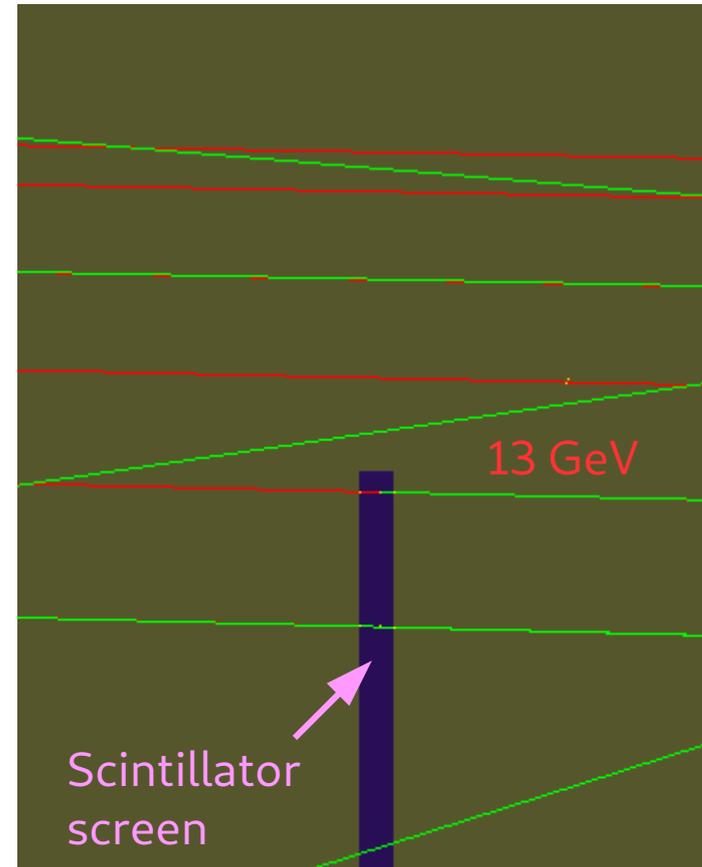


Electrons (GeV):  
16.5, 16, 15, 14,  
13, 12

Vacuum chamber

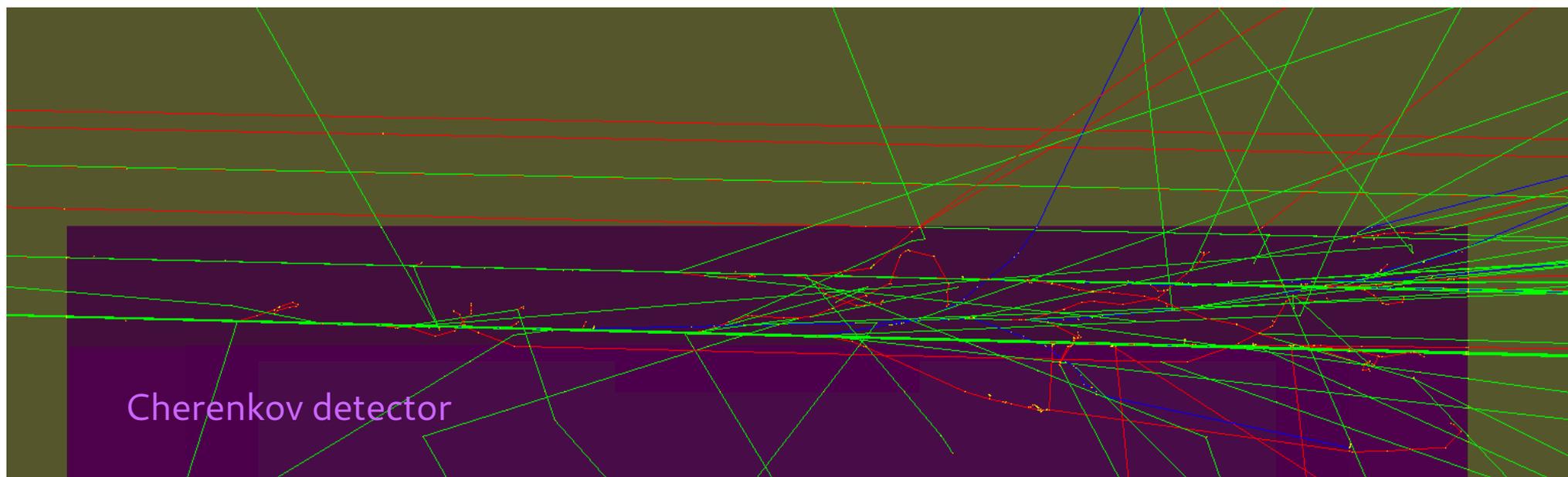


Window (Al)



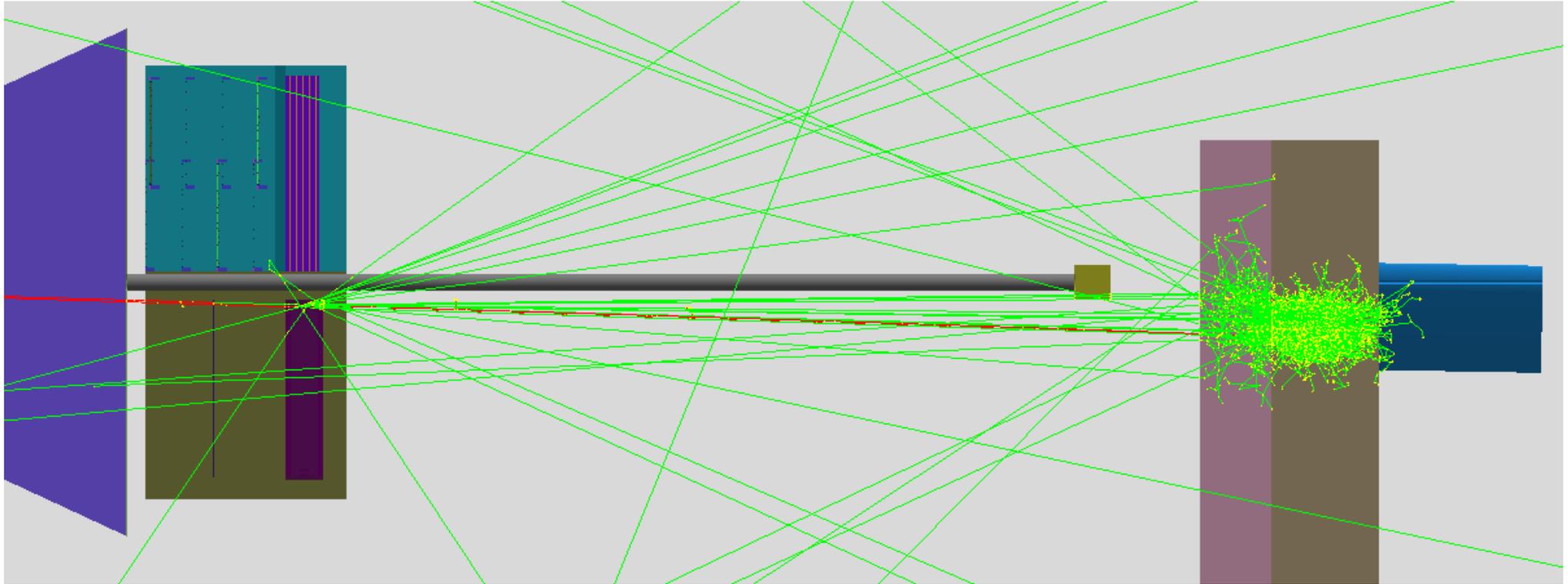
Scintillator  
screen

13 GeV

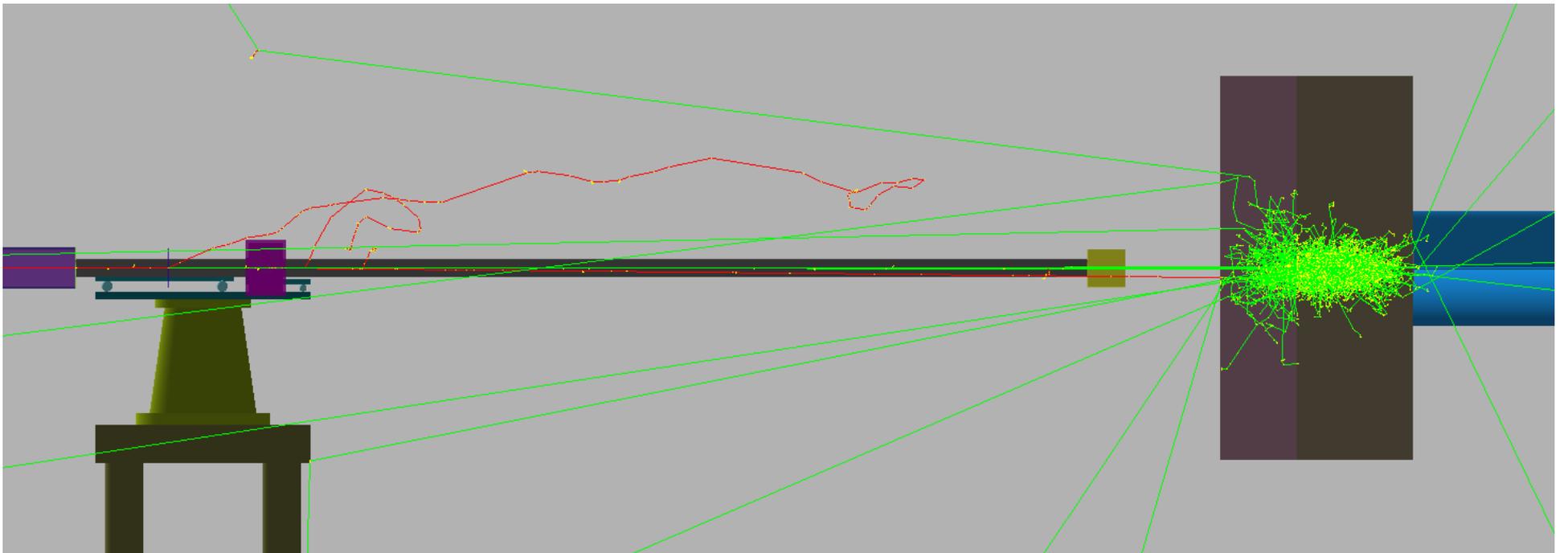
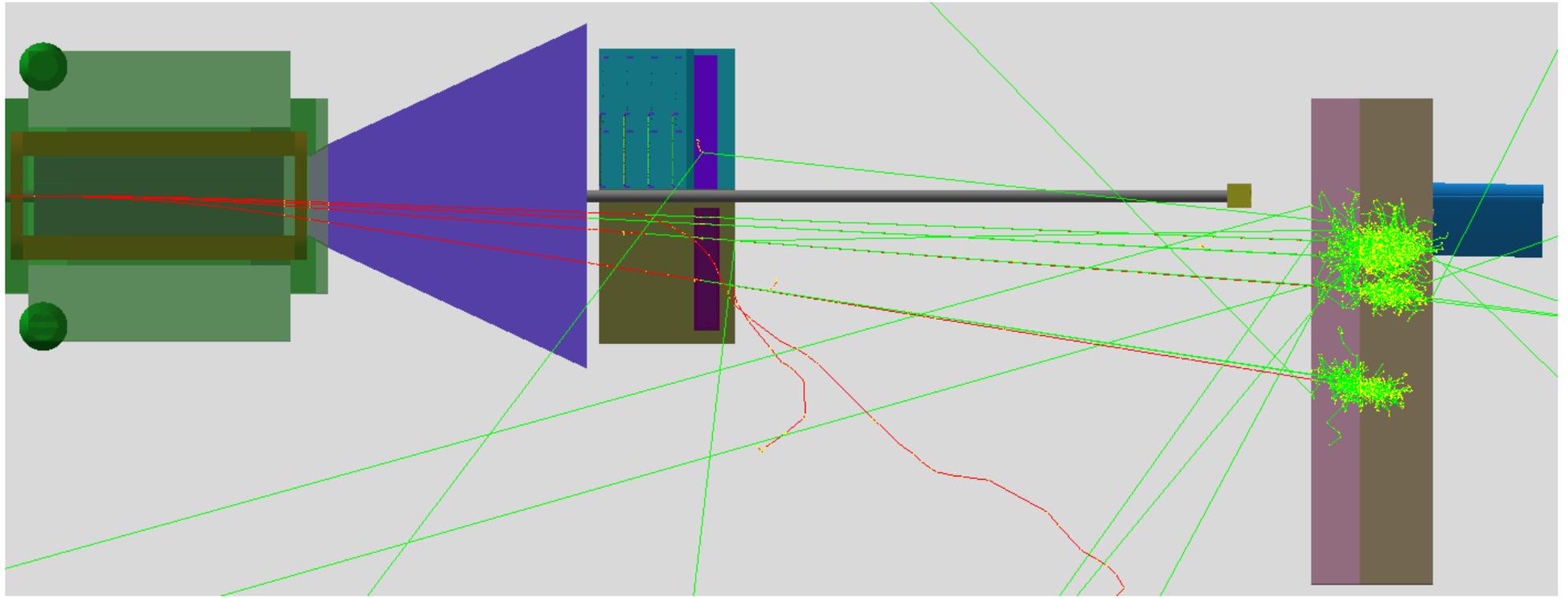


Cherenkov detector

# Electrons (GeV): 11, 10



# Electrons (GeV): 2, 4, 6, 8



# Support

Adapted from Noam's 3D CAD

