

(To be returned by 10:15 on Friday 11.4.)

1-2. GEANT4 is a toolkit for simulating interactions between particles and matter, through which the particle is travelling. Use GEANT4 example basic/B4/B4a to simulate these interactions. Describe in your answer what type of particle detector is being simulated (what materials, approximate geometry). Simulate the interaction of a 10 GeV

- a) electron,
- b) proton,
- c) alpha particle

in the detector. Change the absorber to water and resimulate. Produce a picture of each simulation.

Please push your answers into your public git repository.