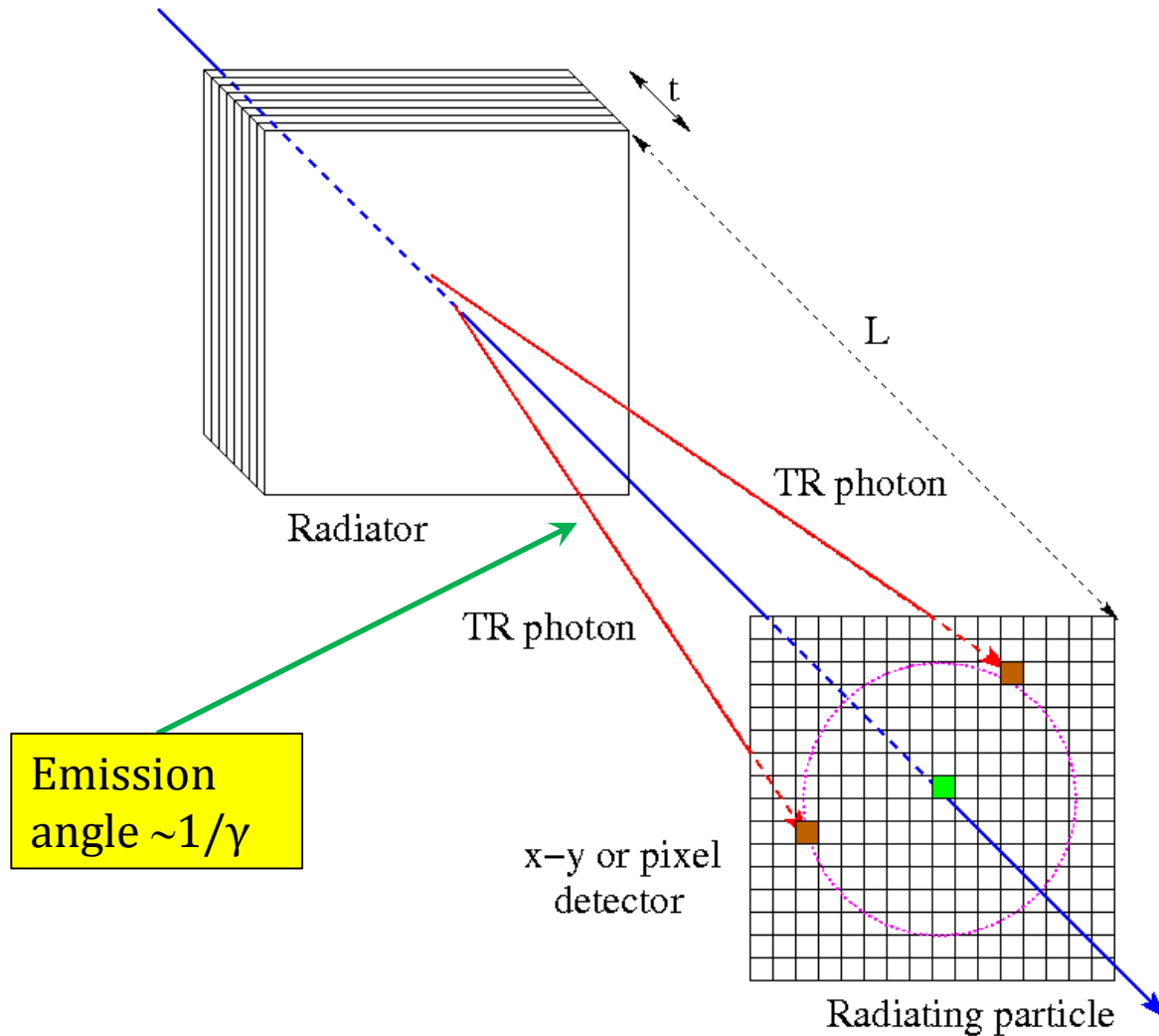


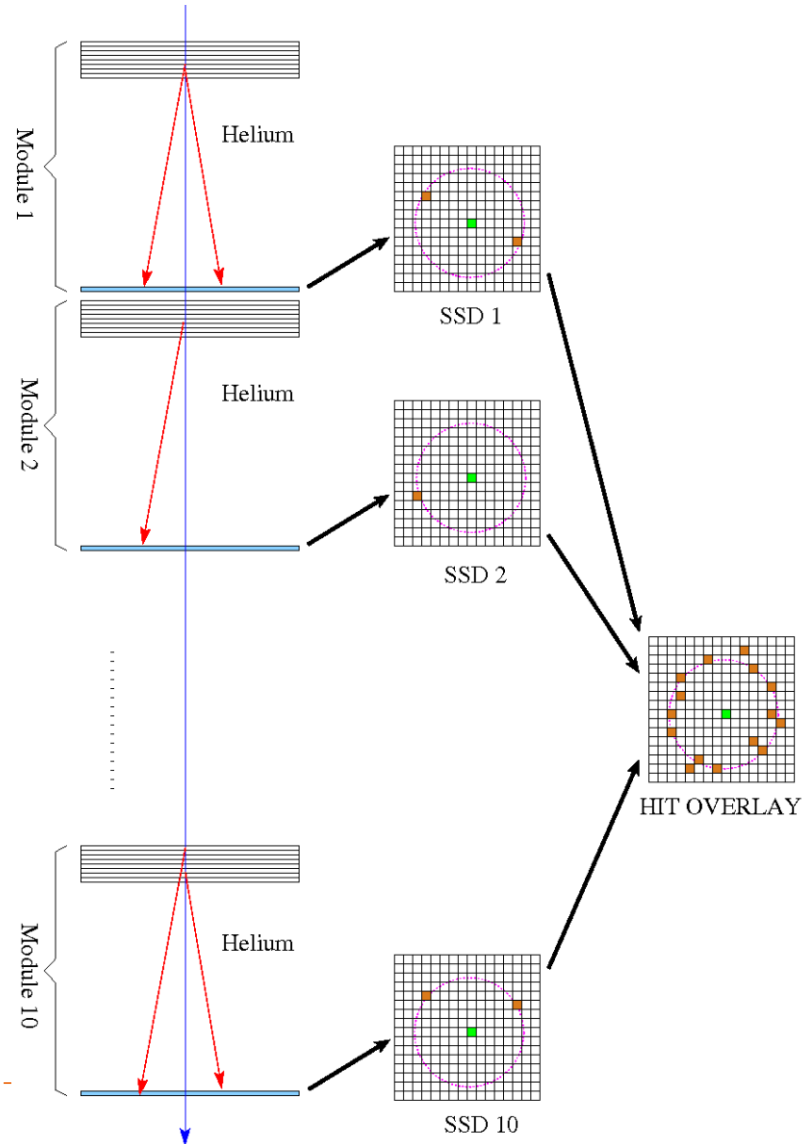
The Ring TRD

Bari Group - TRD SAS meeting, 01/02/2017

Single Ring TRD module



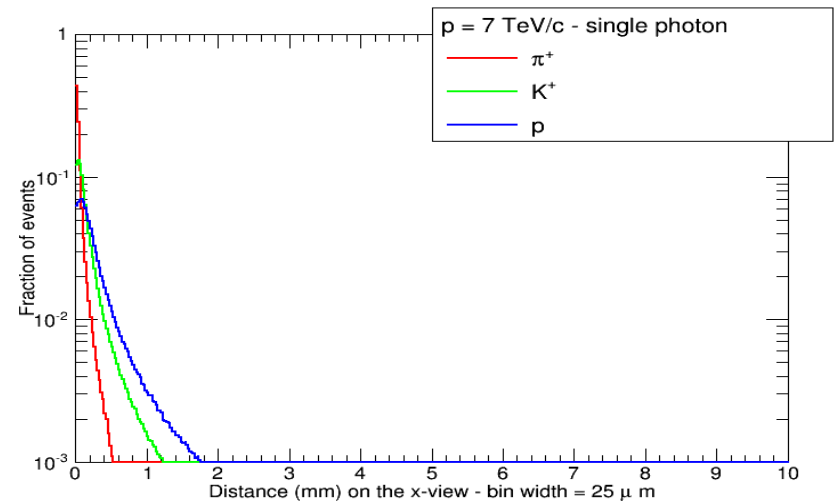
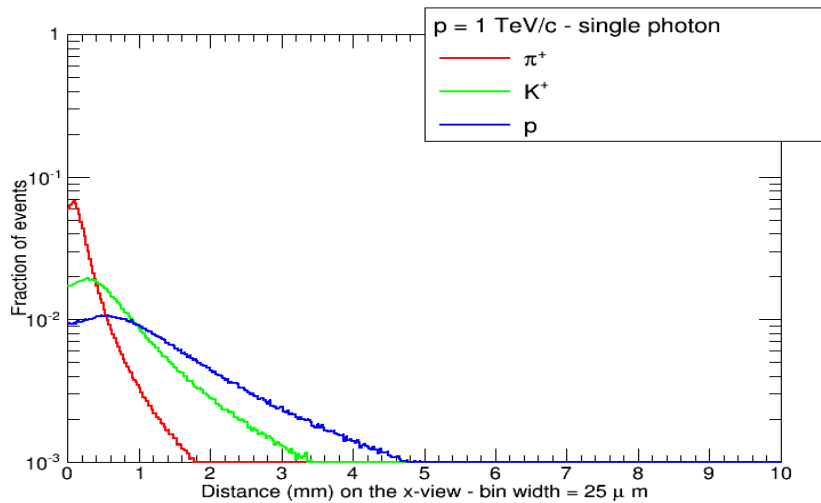
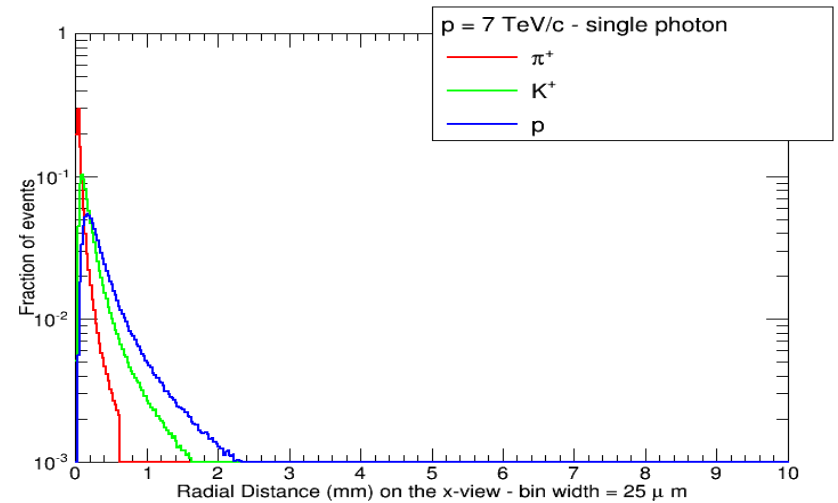
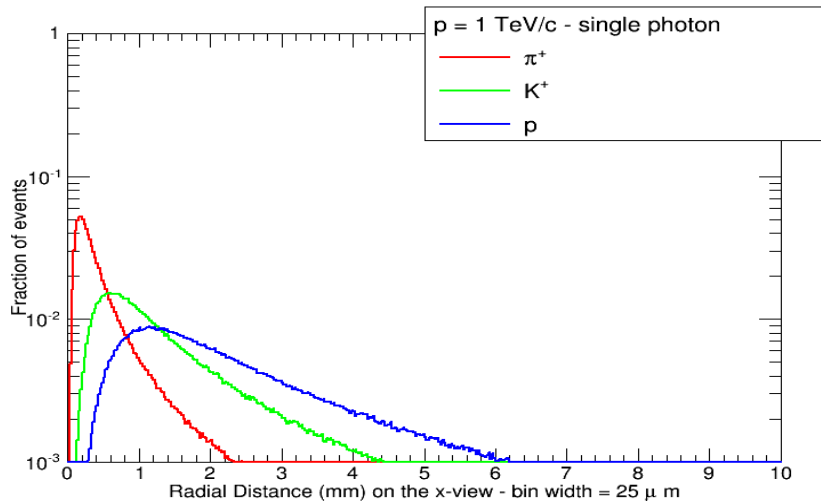
Multiple module Ring TRD



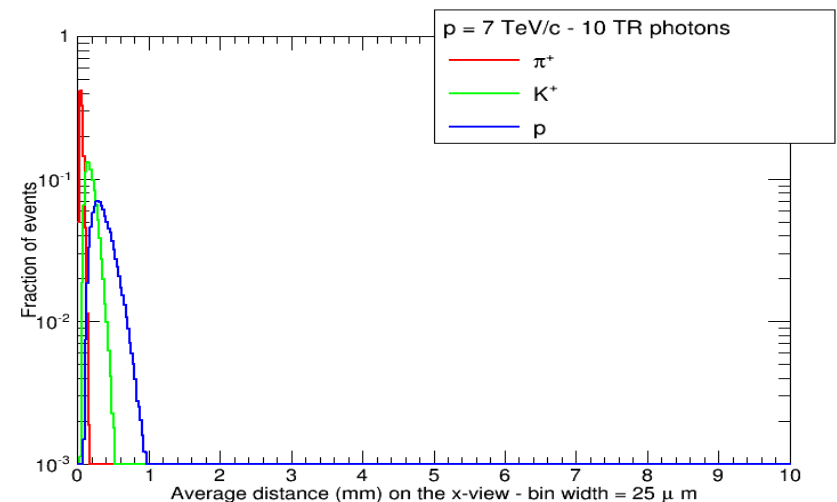
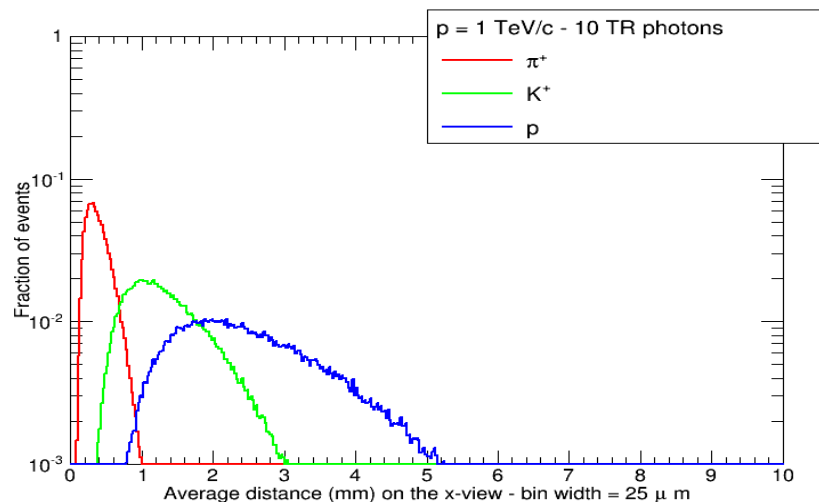
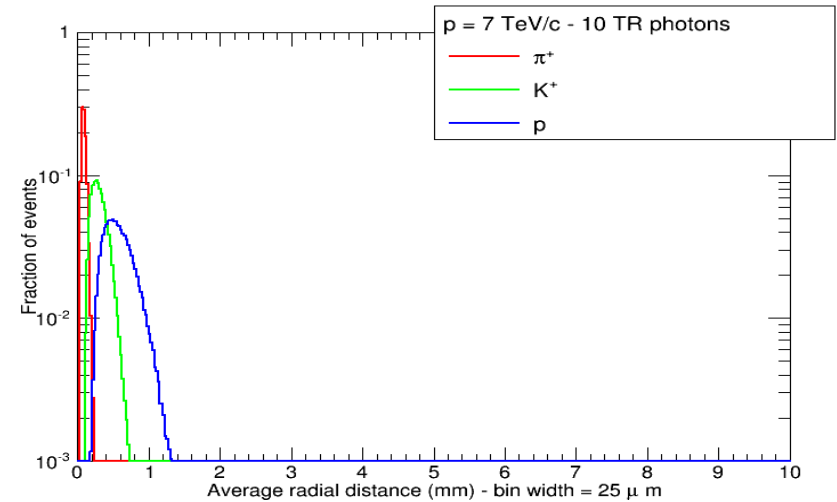
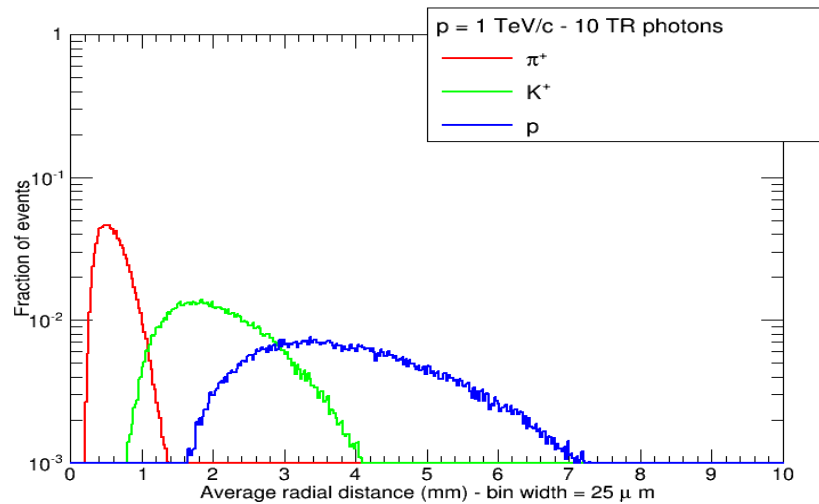
Fast simulation

- ▶ We used the angular distribution of TR photons produced at a single interface
- ▶ We neglect the radiator thickness, i.e. we assume $t \ll L$
- ▶ In our calculations we assume $L=1\text{m}$ and we assume a detector pitch of $25\mu\text{m}$
 - ▶ Configuration with pixel detectors → the real distances (2D) of TR X-rays from the particle are considered
 - ▶ Configuration with strip detectors → the projected distances (1D) of TR X-rays from the particle are considered

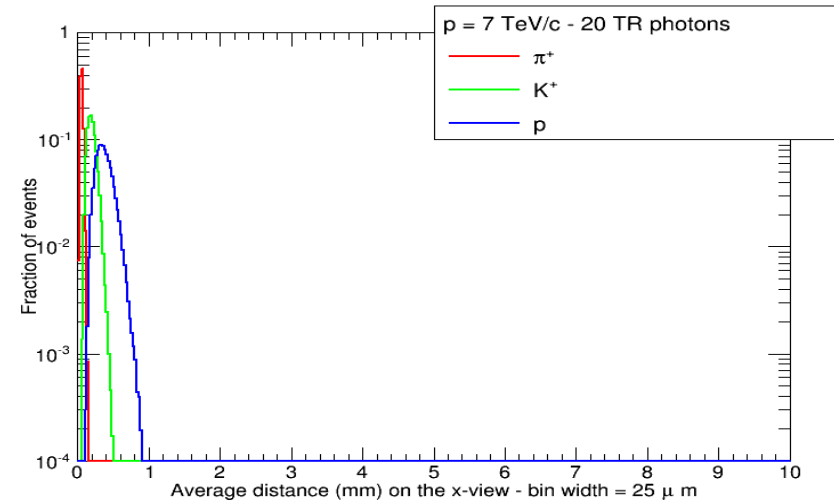
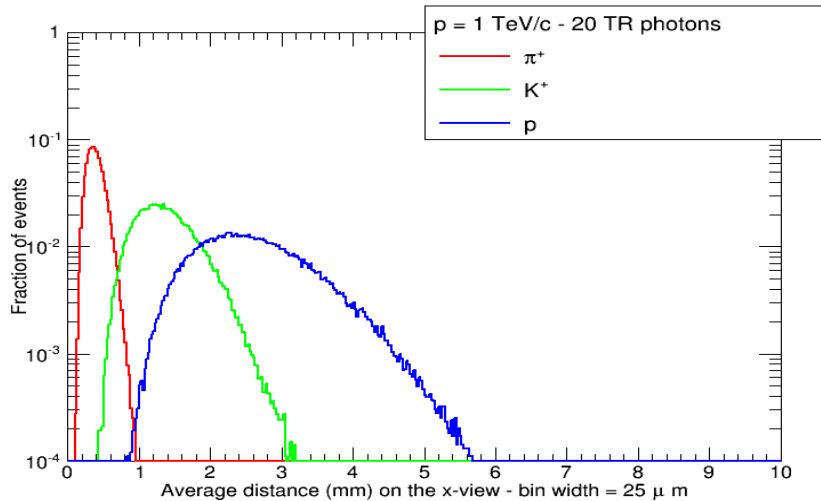
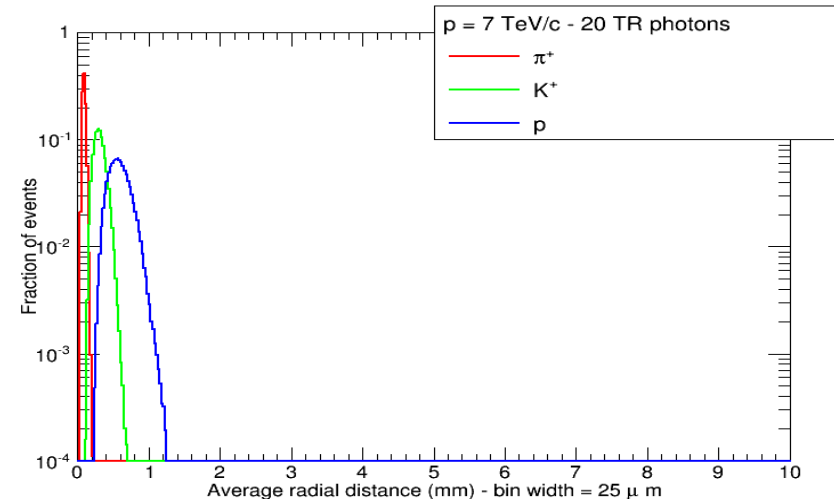
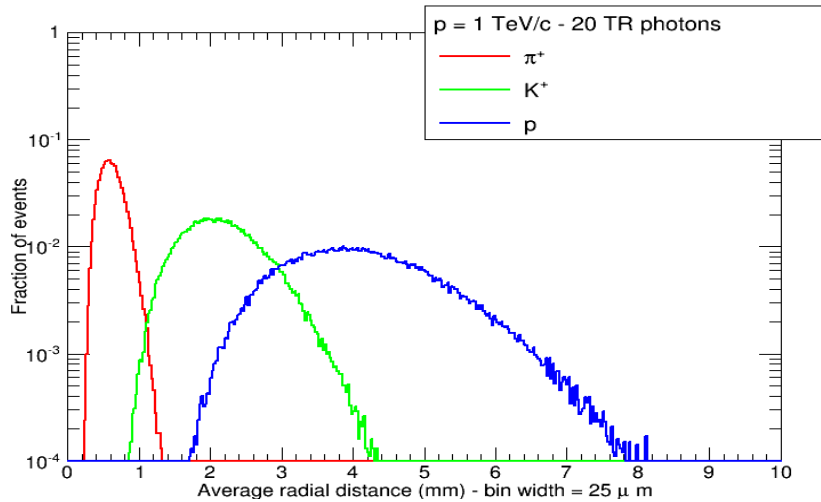
Distance distributions (single photons)



Distance distributions (10 photons)



Distance distributions (20 photons)



Particle identification

