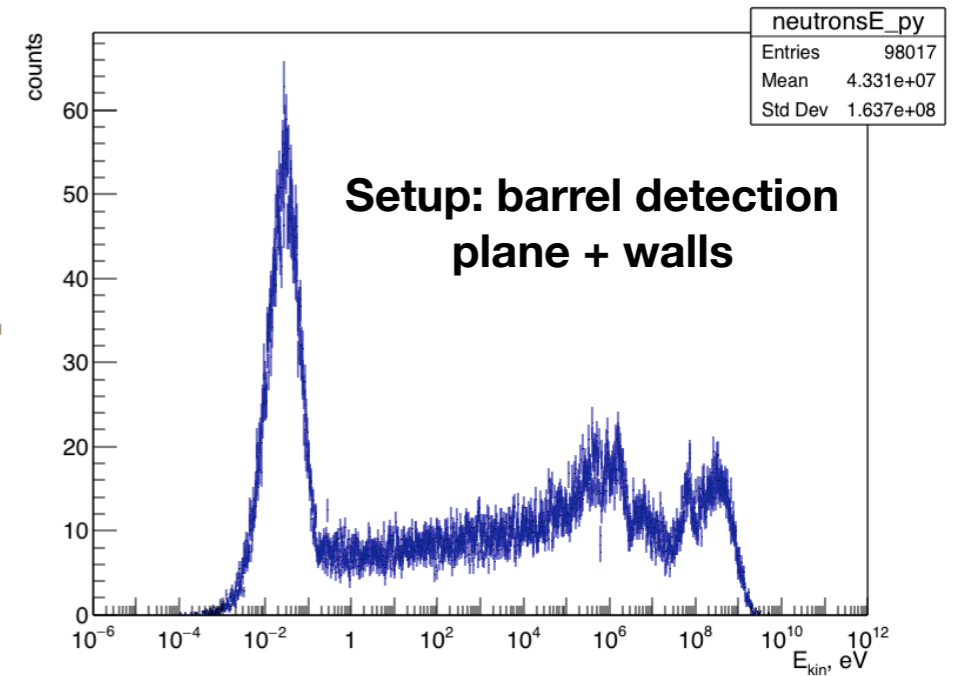
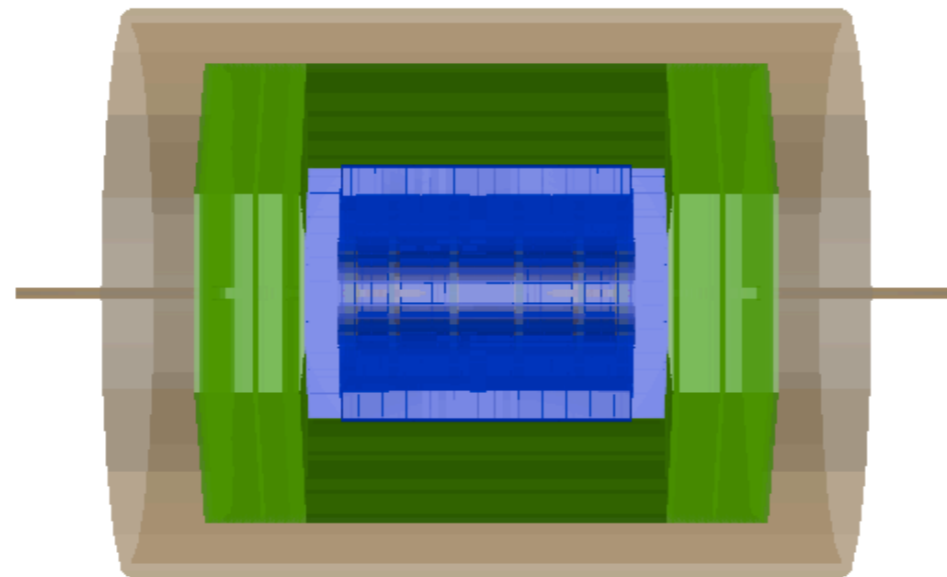
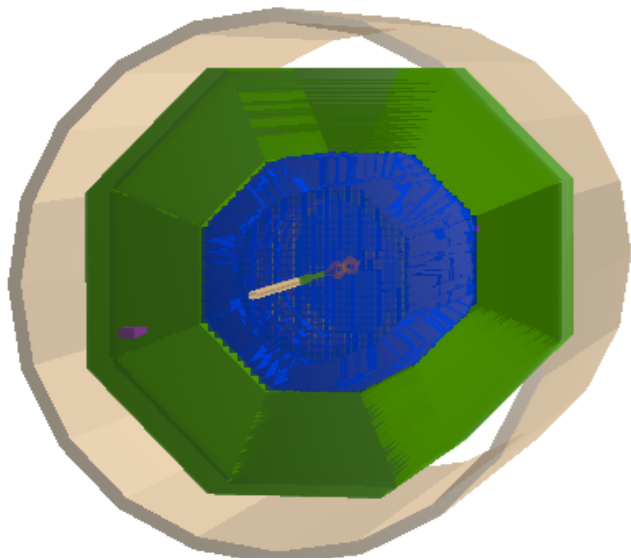


# Particle flux density at NICA SPD

Gridin Andrei (JINR)

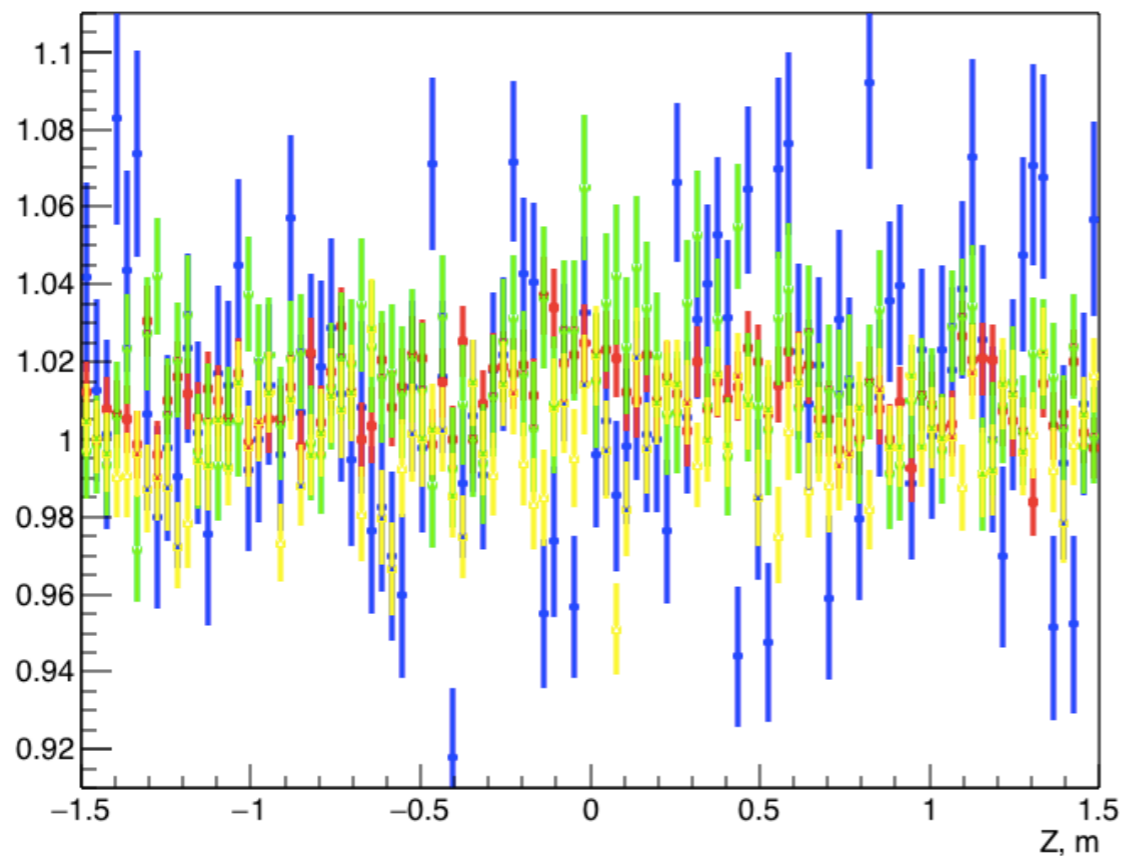
16.02.2022

# Concrete / iron wall (20 cm)

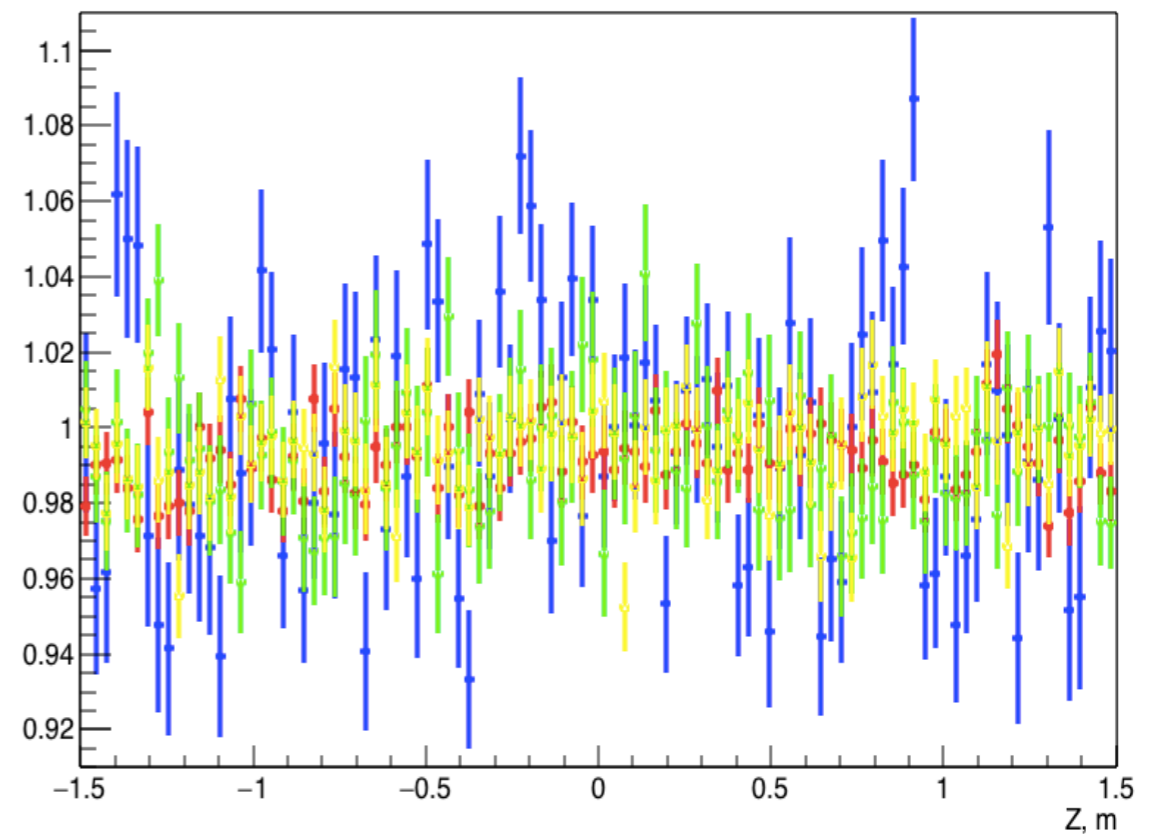


- charged
- photons
- neutrons  $E_{kin} > 100$  keV
- thermal neutrons

with iron wall / default setup



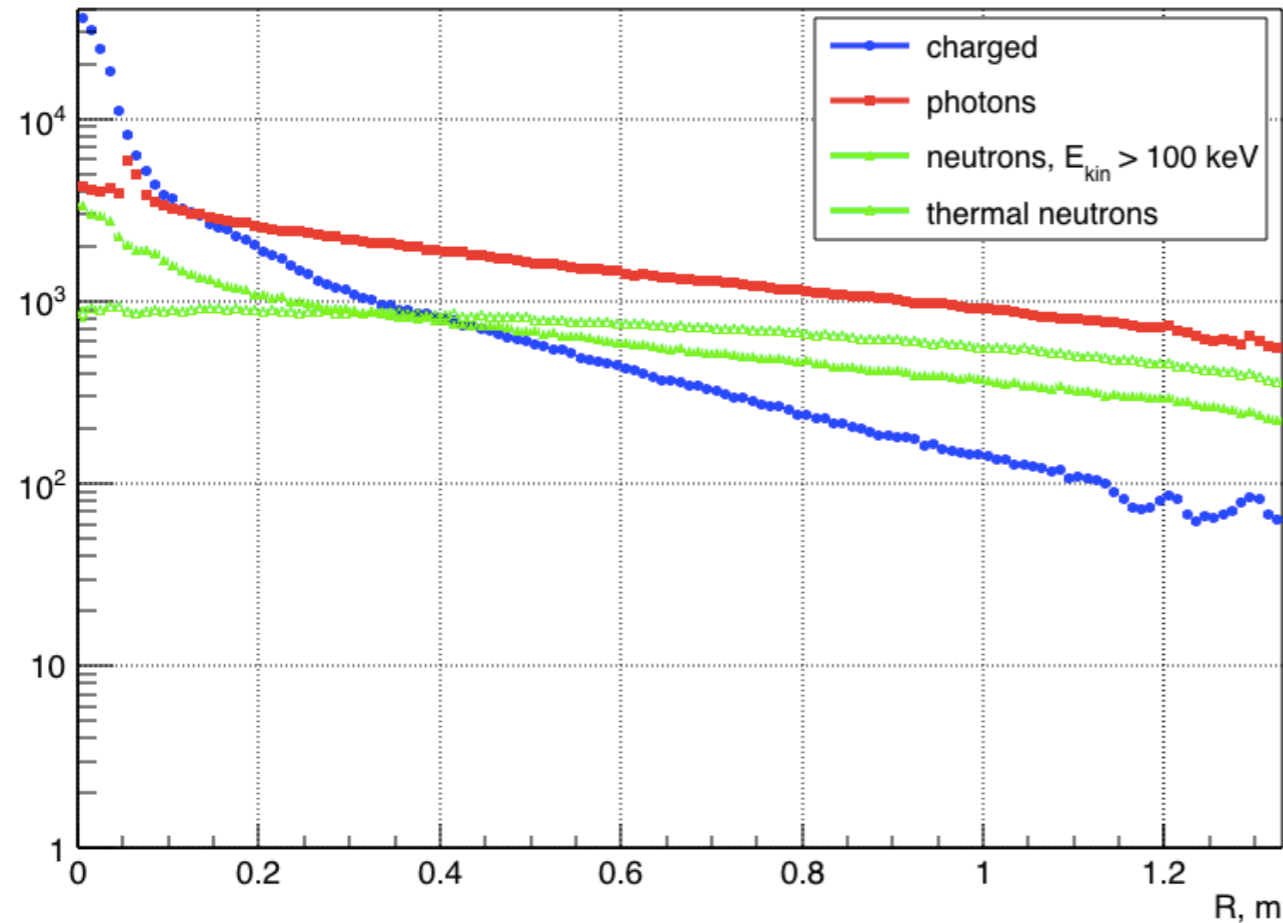
with concrete wall / default setup



# Flux density in endcaps

Rate,  $\text{cm}^{-2}\text{s}^{-1}$

Z=1.3m



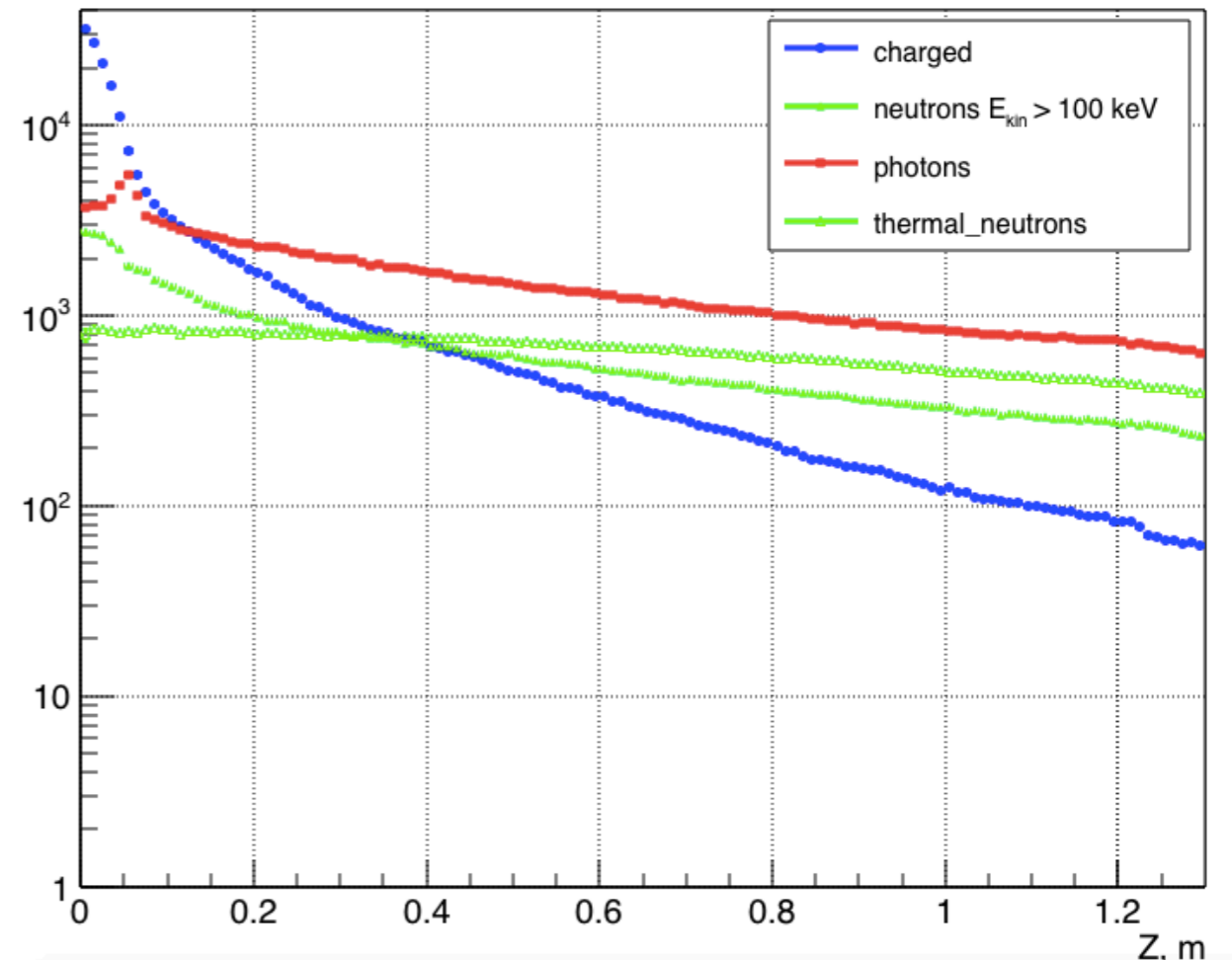
$$\sqrt{s} = 27 \text{ GeV}$$

$$L = 10^{32} \text{ cm}^{-2}\text{s}^{-1}$$

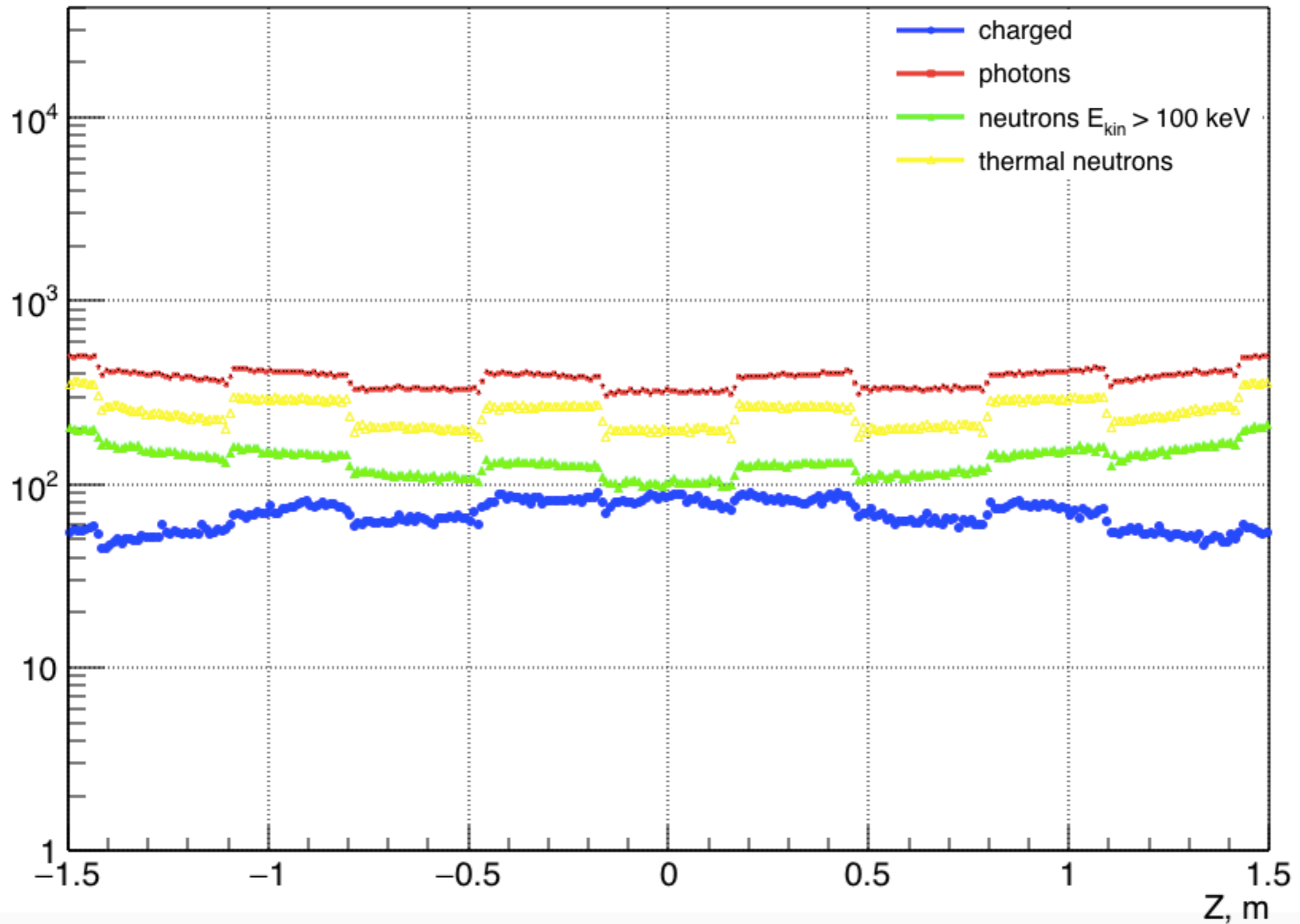
To be checked: the difference in thermal neutron flux could come from the new geometry (TOF, aerogel, beam-beam counter).

Rate,  $\text{cm}^{-2}\text{s}^{-1}$

Z=1.5m



# Flux density in barrel



# Backup: plots from CDR

