

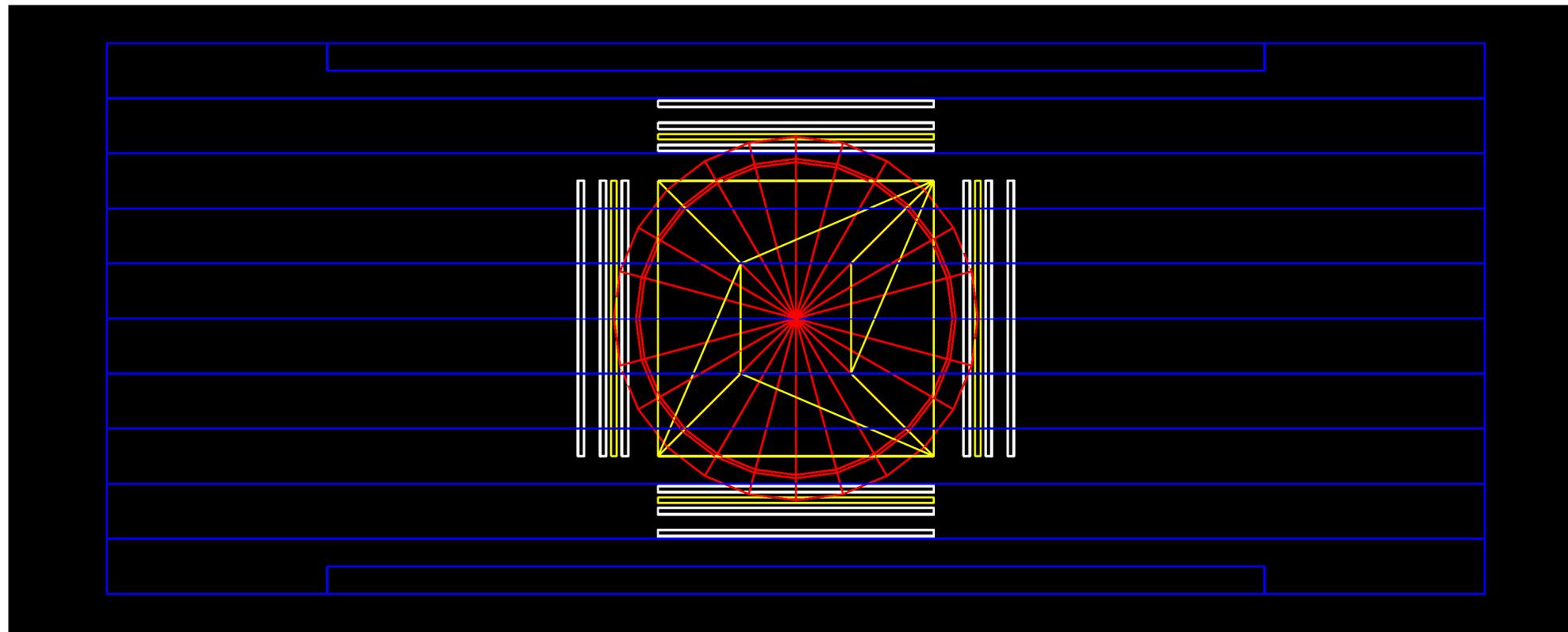
# Status report (7 Nov. 2016)

Jongwon Hwang

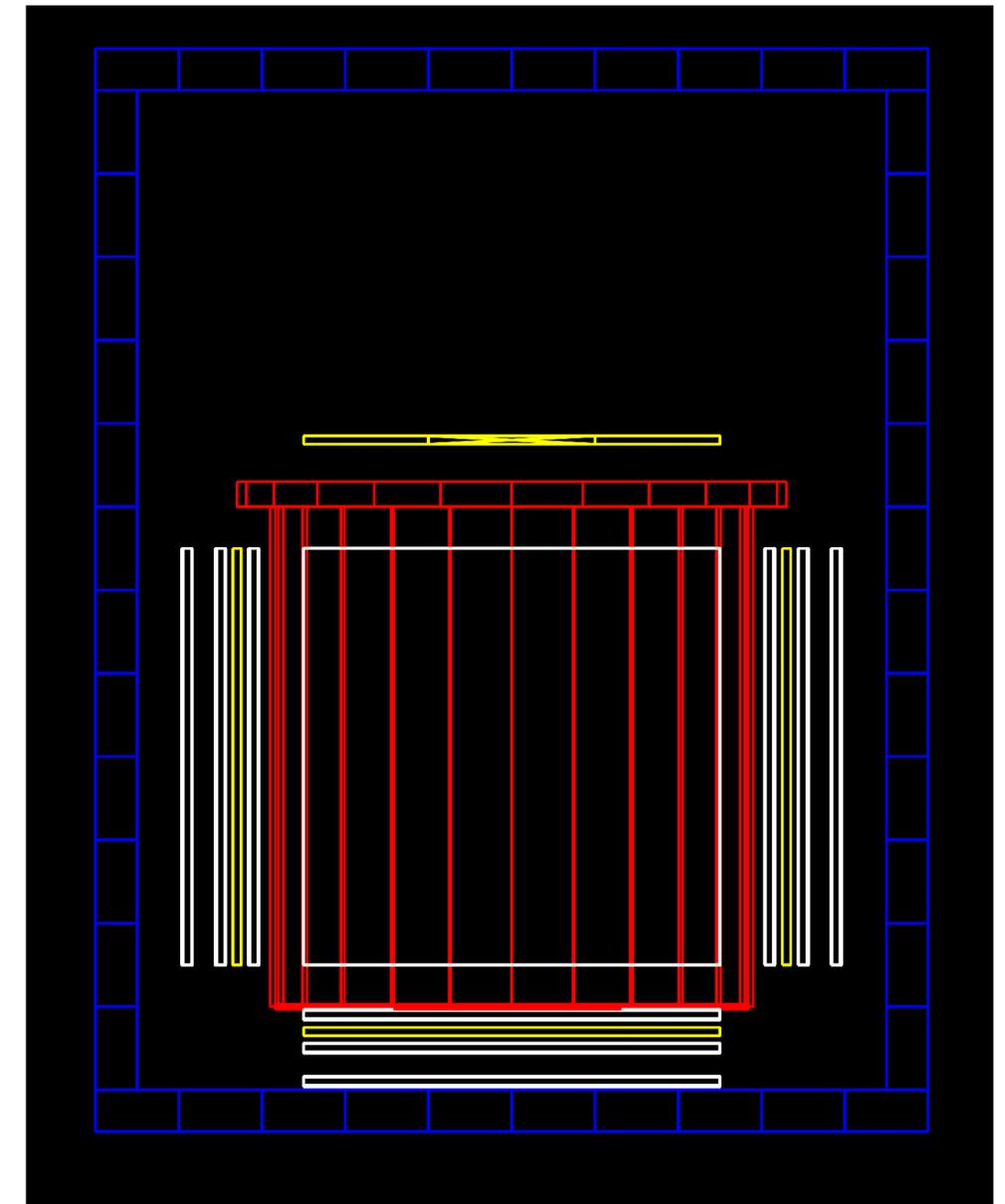


# Simulation Geometry

Vertical axis:  $Y \rightarrow Z$



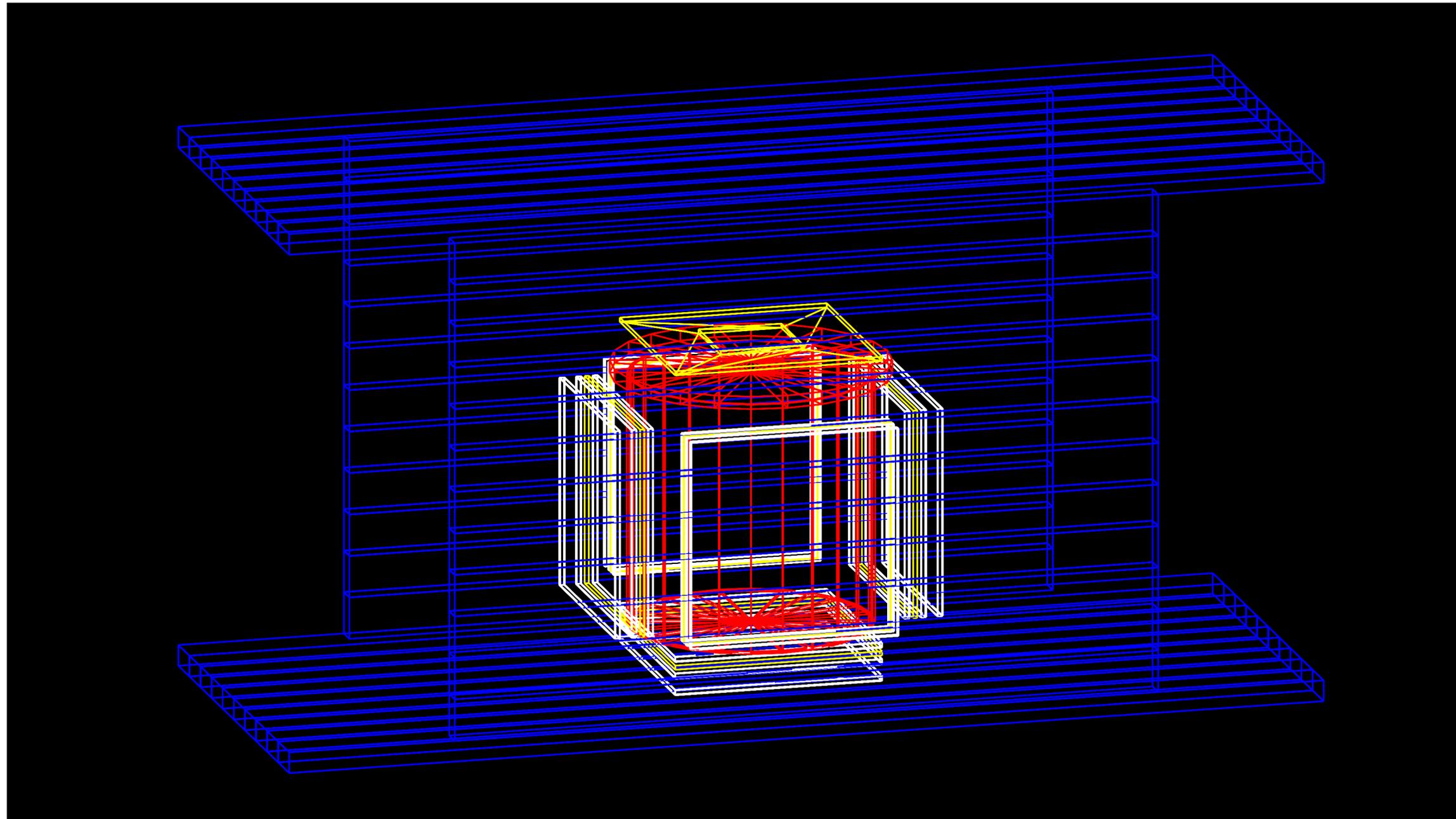
Top View



Side View

**Red: free-fall chamber / Blue: TOF detector / White: MicroMegas**

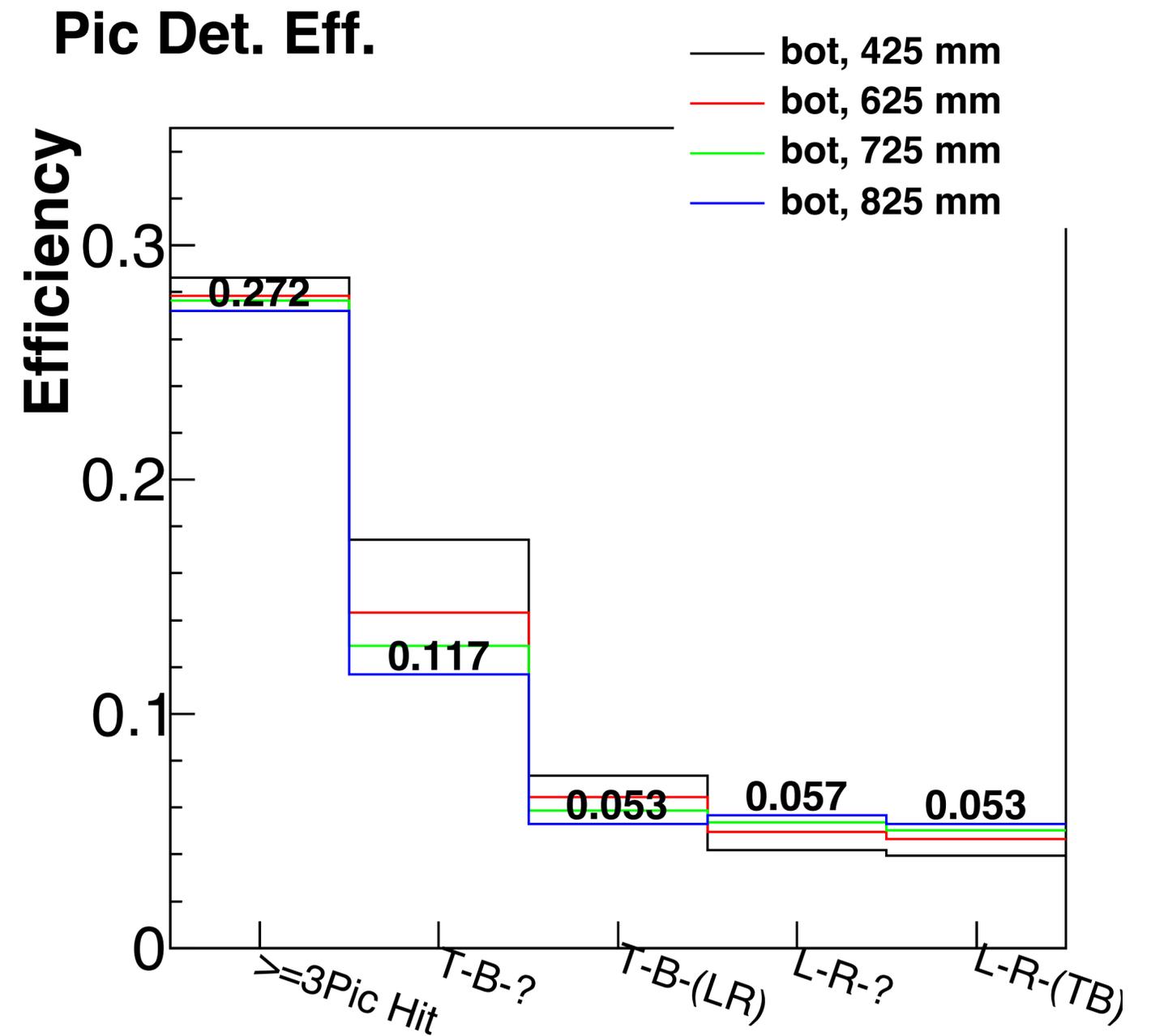
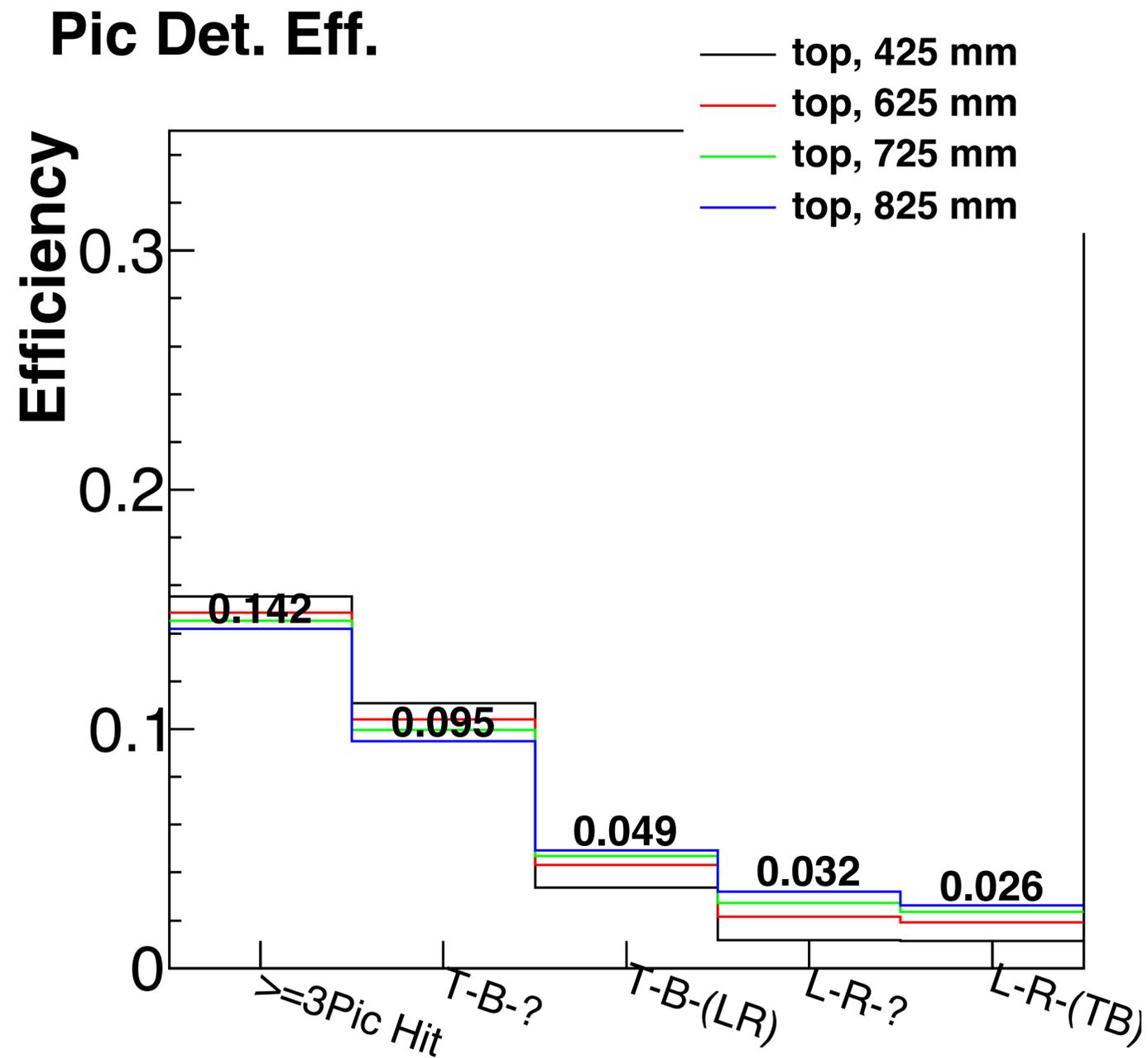
# Simulation Geometry



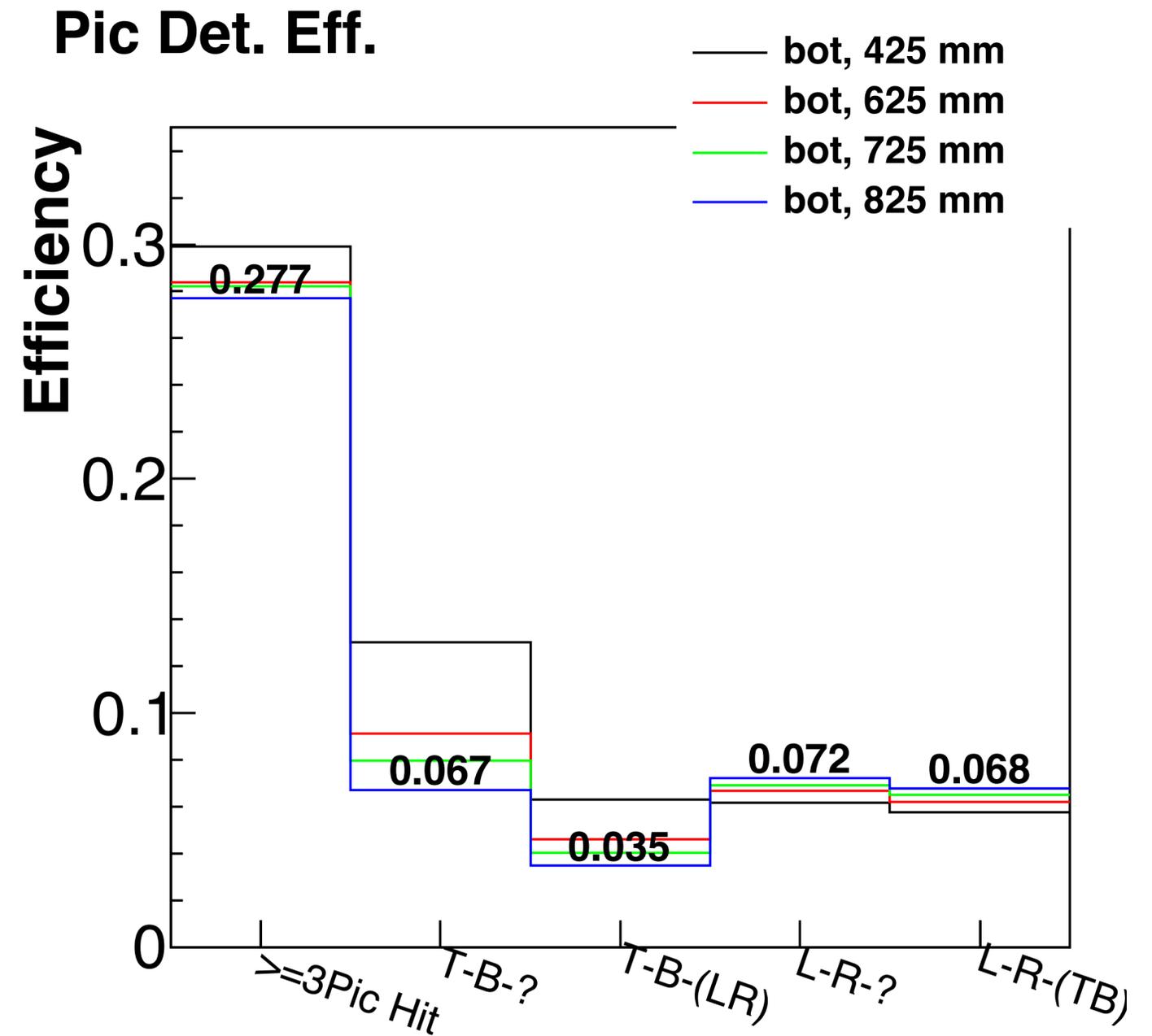
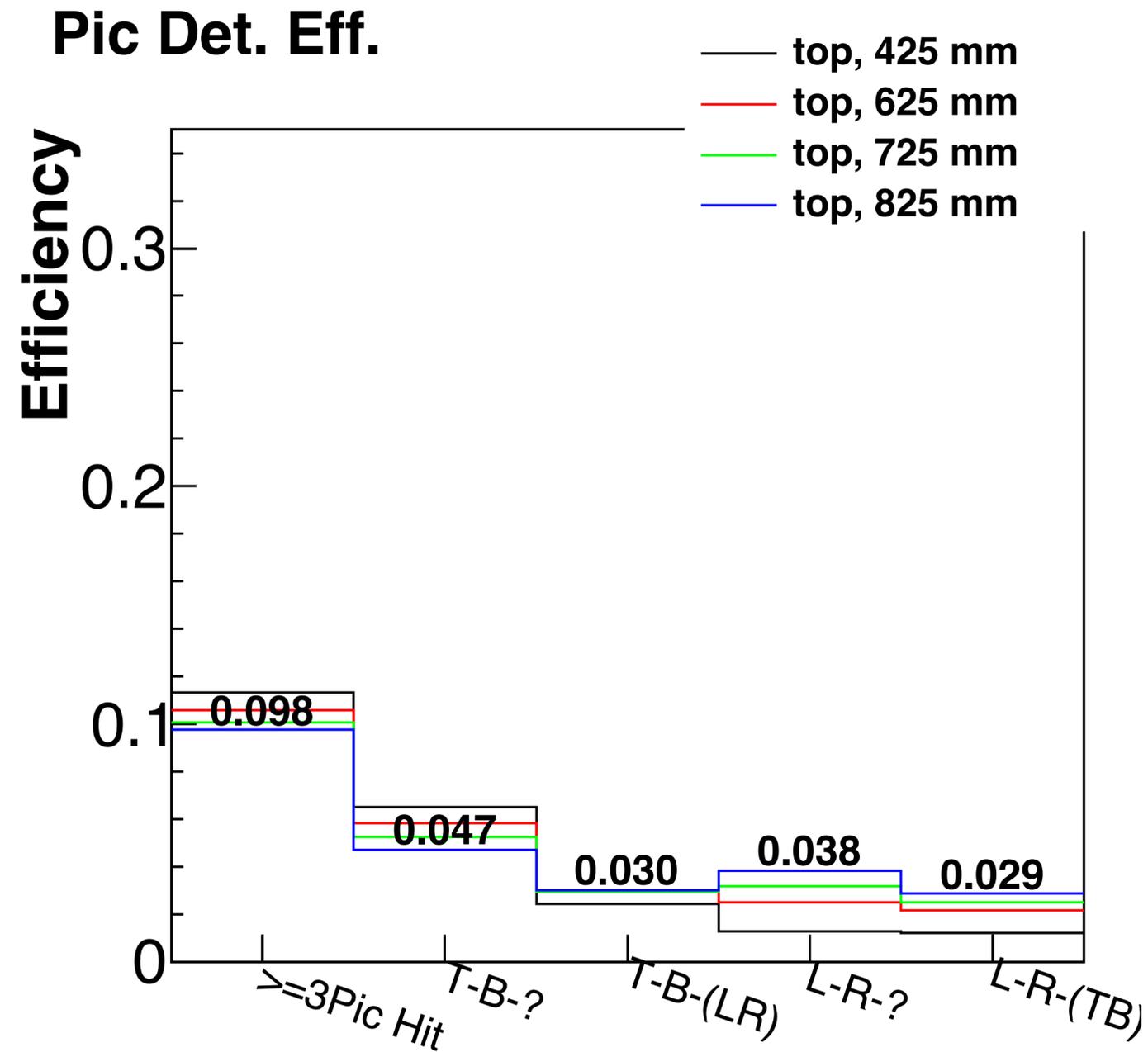
Quarter View

**Red: free-fall chamber / Blue: TOF detector / White: MicroMegas**

# 3-Pic Detection Efficiency (New Geometry)

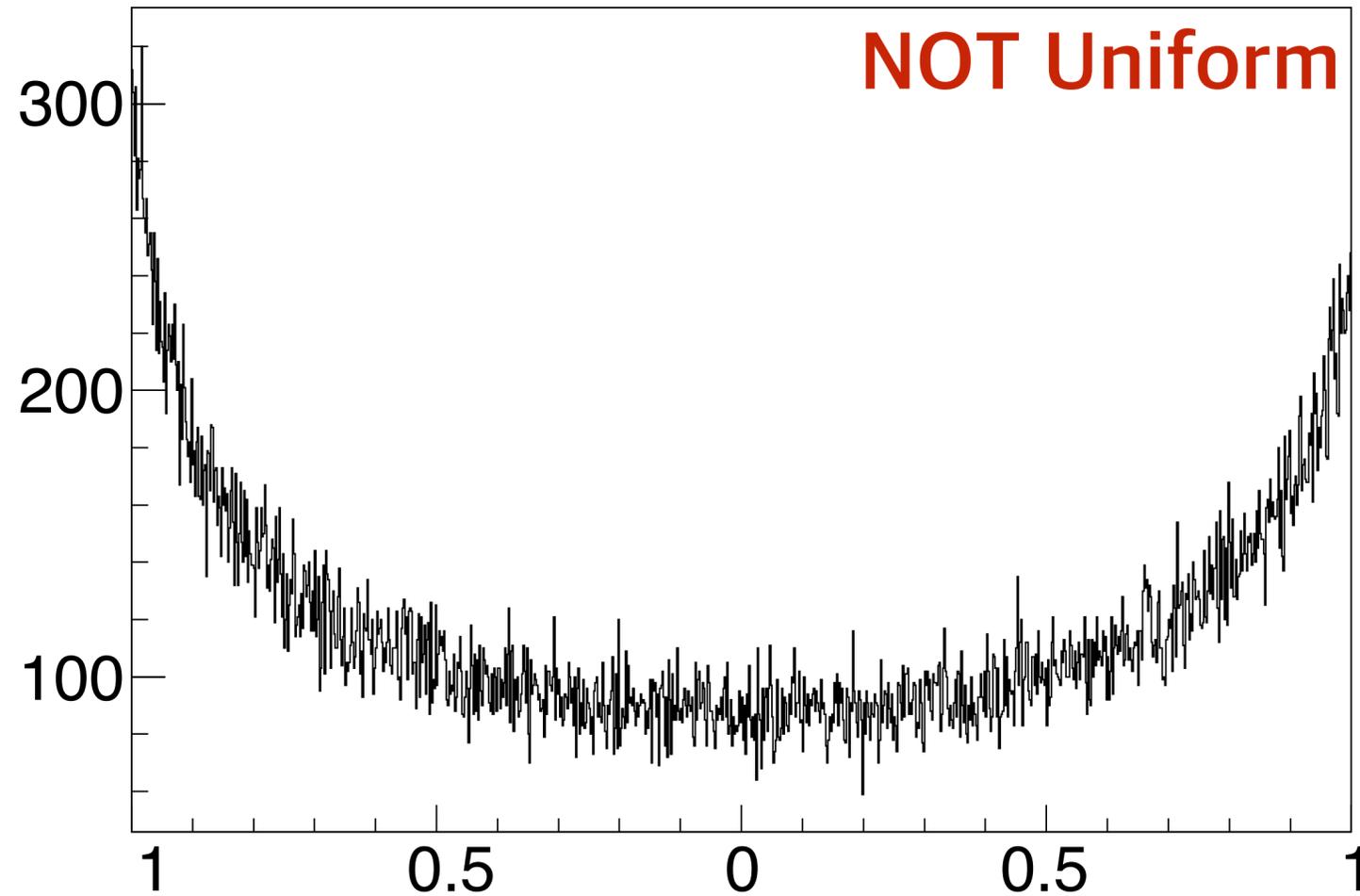


# 3-Pic Detection Efficiency (Old Geometry, 250 cm-TB)

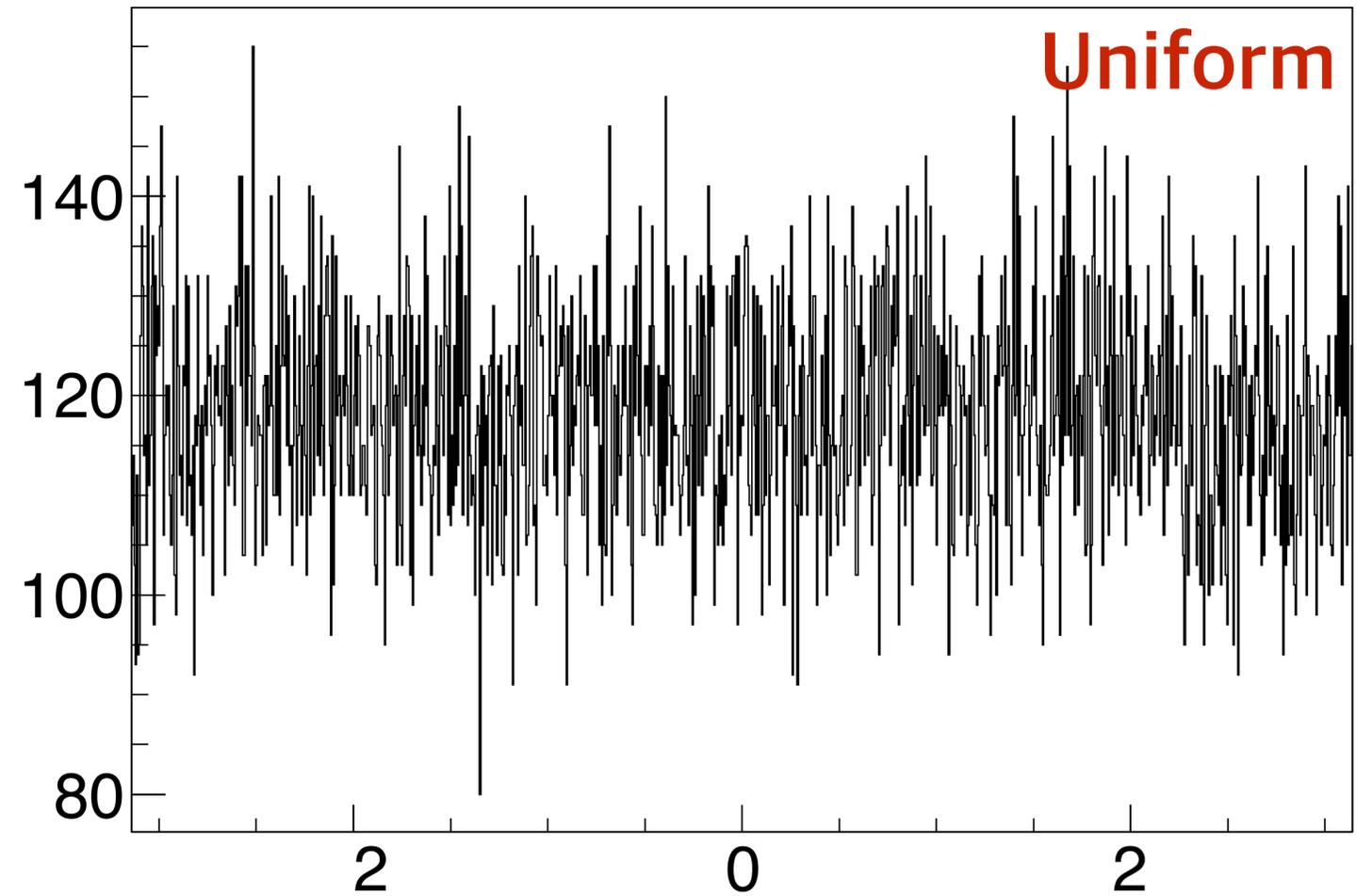


# Angular Distribution of Charged Pion

**Pic Cos Theta**



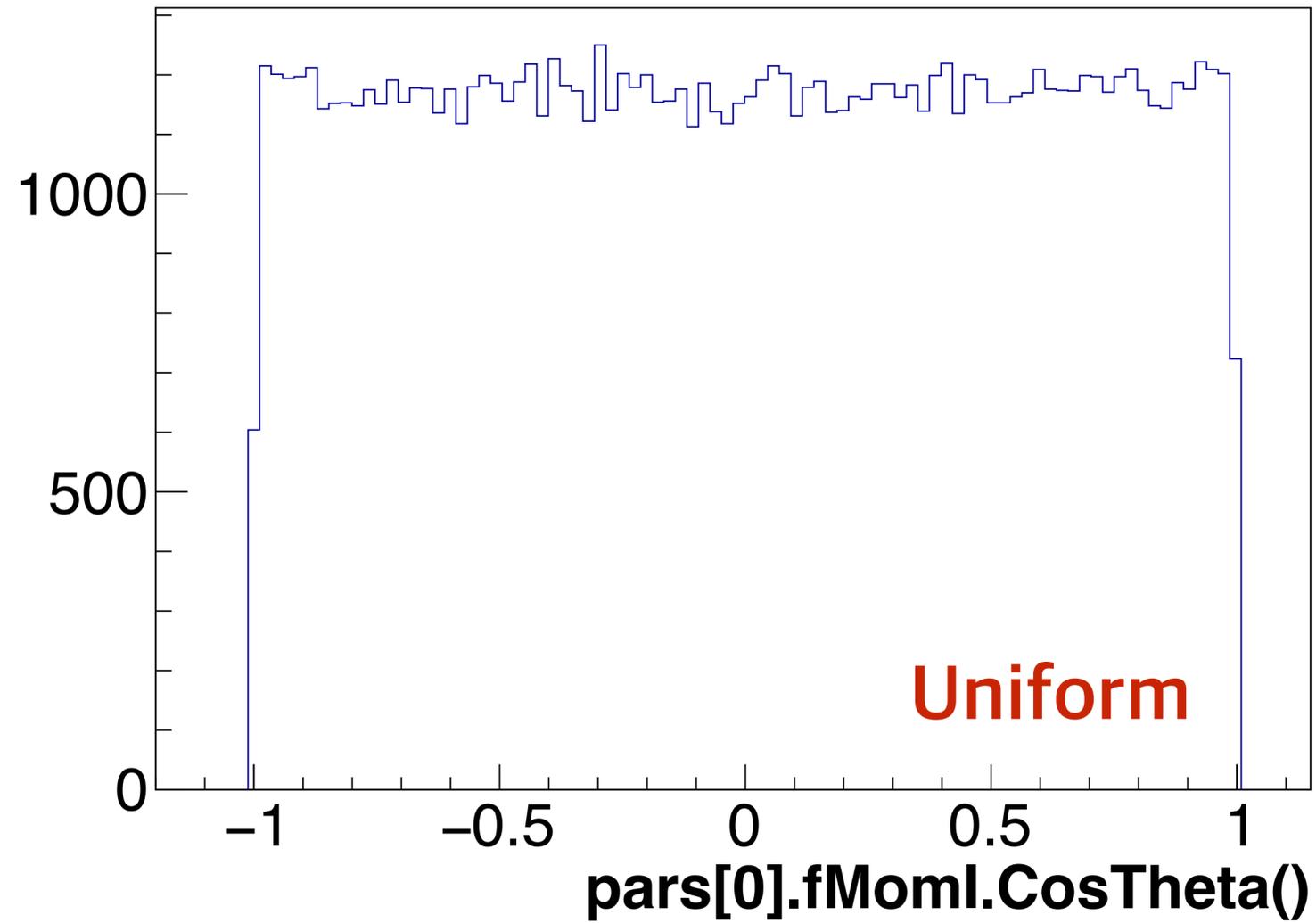
**Pic Phi**



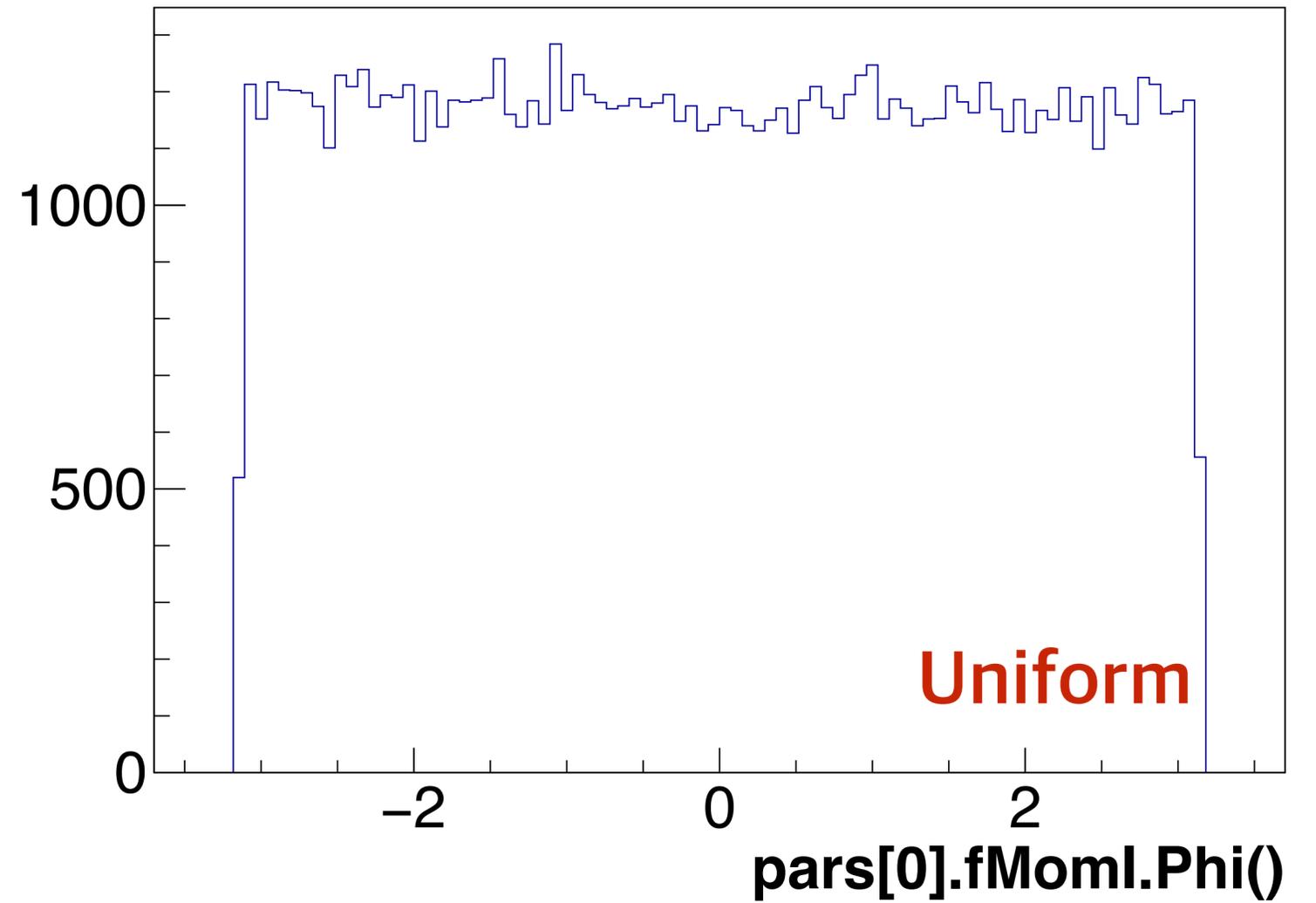
**Both should be UNIFORM if the distribution is isotropic.**

# Isotropic Angular Distribution

`pars[0].fMoml.CosTheta()`



`pars[0].fMoml.Phi()`



# Problem in Simulation

- Problem: Huge change of detection efficiency after modifying geometry (esp. change of the orientation:  $Y \rightarrow Z$ )
- Origin: Anisotropic distribution of secondary pions
- Solution: