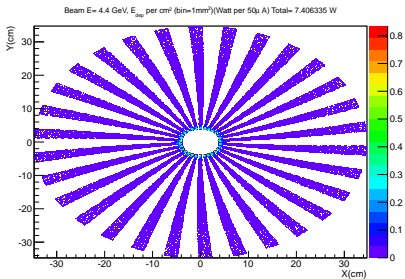
A 3D schematic diagram of a neutron detector assembly. The diagram shows a complex arrangement of components, including a central detector core surrounded by a moderator and reflector. The components are color-coded in shades of orange, brown, and grey. A blue arrow points to a specific component in the center. The background is a light blue gradient.

# NEUTRON BACKGROUND RADIATION IN SOLID

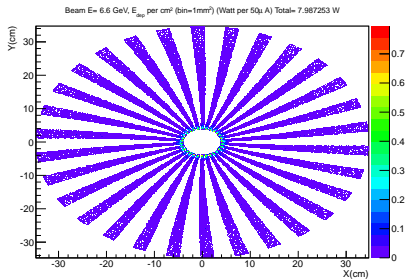
Lorenzo Zana  
Syracuse University  
November 6 2012

# Power flux from Beam and Target on first baffle

$E=4.4\text{GeV}$

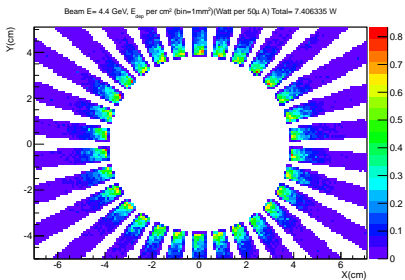


$E=6.6\text{GeV}$

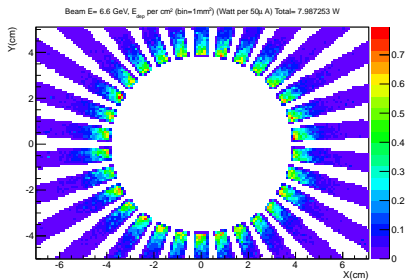


# Power flux from Beam and Target on first baffle

E=4.4GeV



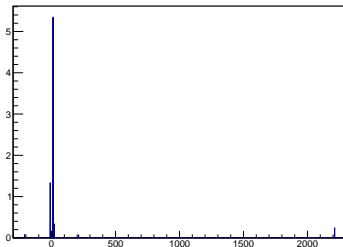
E=6.6GeV



# Power flux from Beam and Target on first baffle

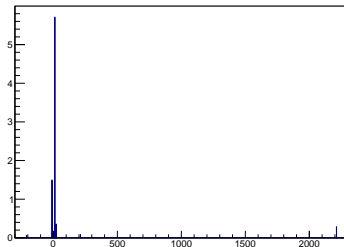
$E=4.4\text{GeV}$

E=4.4GeV Particle id Energy deposited (Watt per 50μ A)



$E=6.6\text{GeV}$

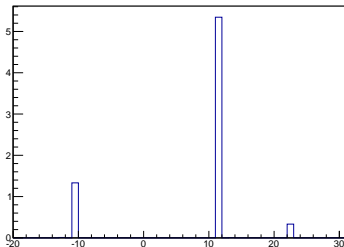
E=6.6GeV Particle id Energy deposited (Watt per 50μ A)



# Power flux from Beam and Target on first baffle

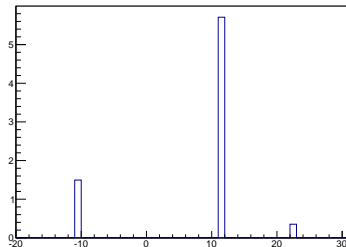
$E=4.4\text{GeV}$

E=4.4GeV Particle id Energy deposited (Watt per 50 $\mu$  A)



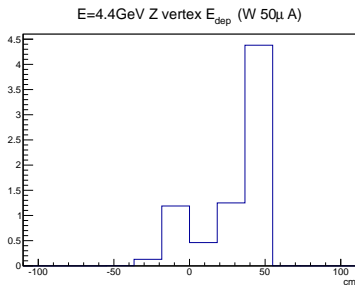
$E=6.6\text{GeV}$

E=6.6GeV Particle id Energy deposited (Watt per 50 $\mu$  A)

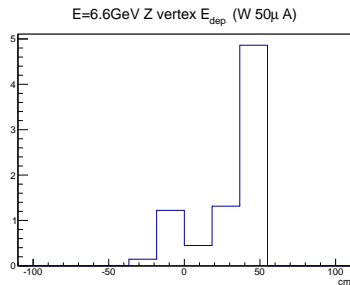


# Power flux from Beam and Target on first baffle

E=4.4GeV



E=6.6GeV



# “Conclusions”

## Causes of Power on first baffle

First baffle start at  $Z=35.5\text{cm}$  (9cm length)  $R_{\min}=3.9\text{cm}$