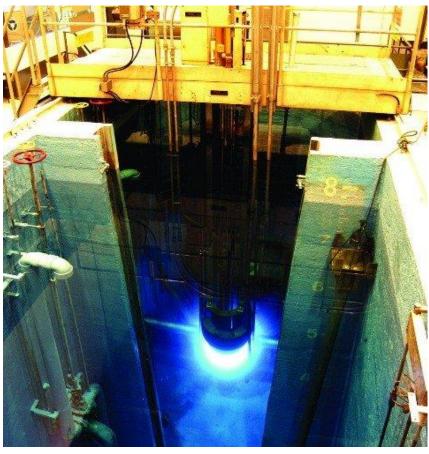
#### Thai TRIGA research reactor (TRR1)



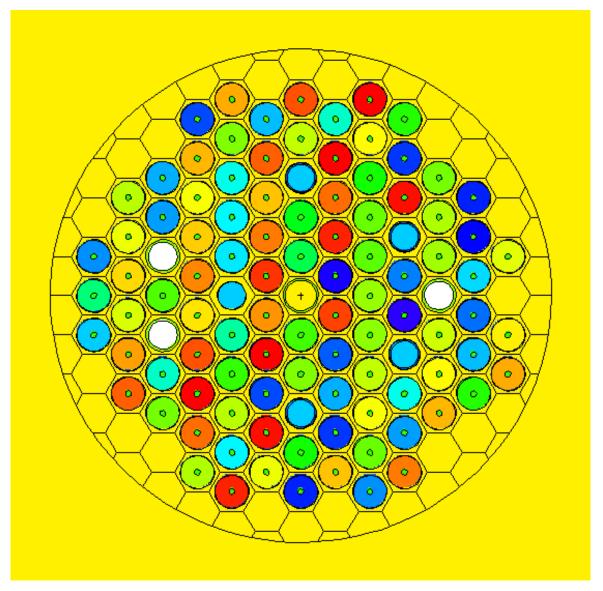


**Phiphat Phruksarojanakun** 

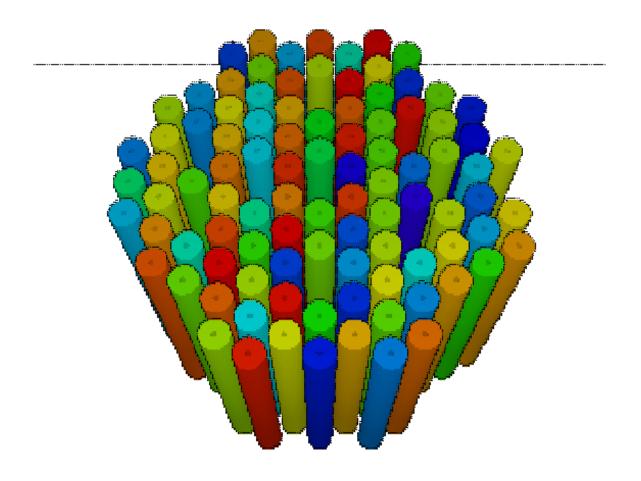
phruksar@oaep.go.th

**IAEA** 

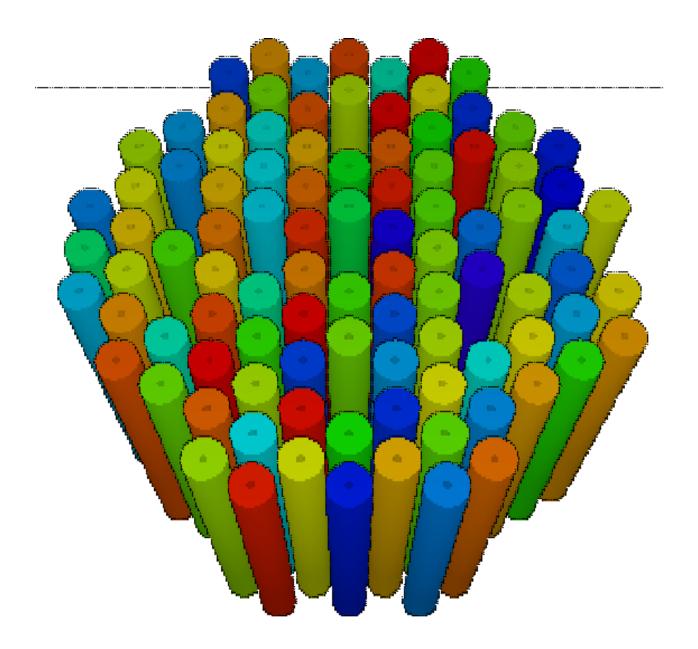
### **Visual Editor Color plot of the fuel pins**



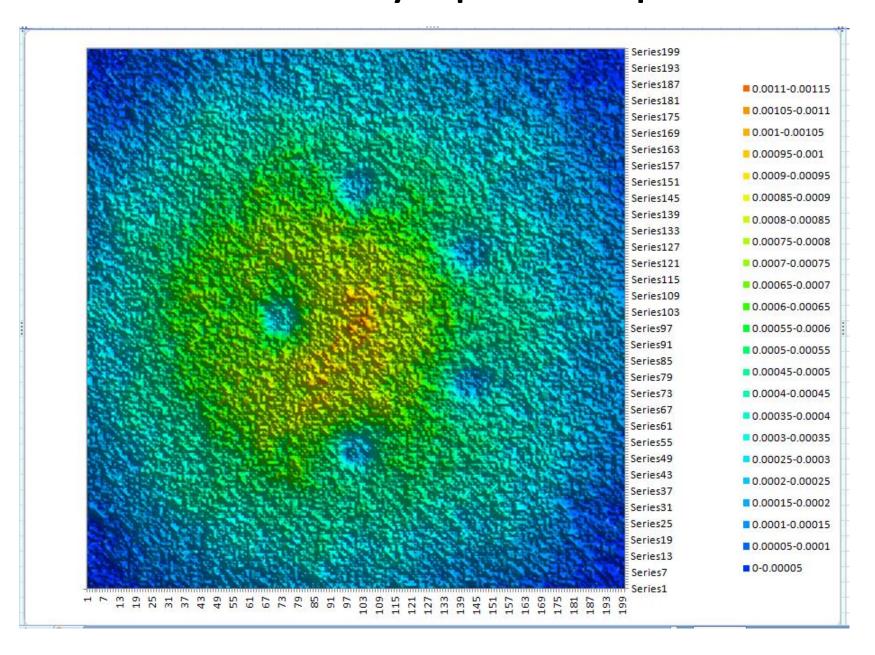
## **Visual Editor 3D Color plot of the fuel pins**



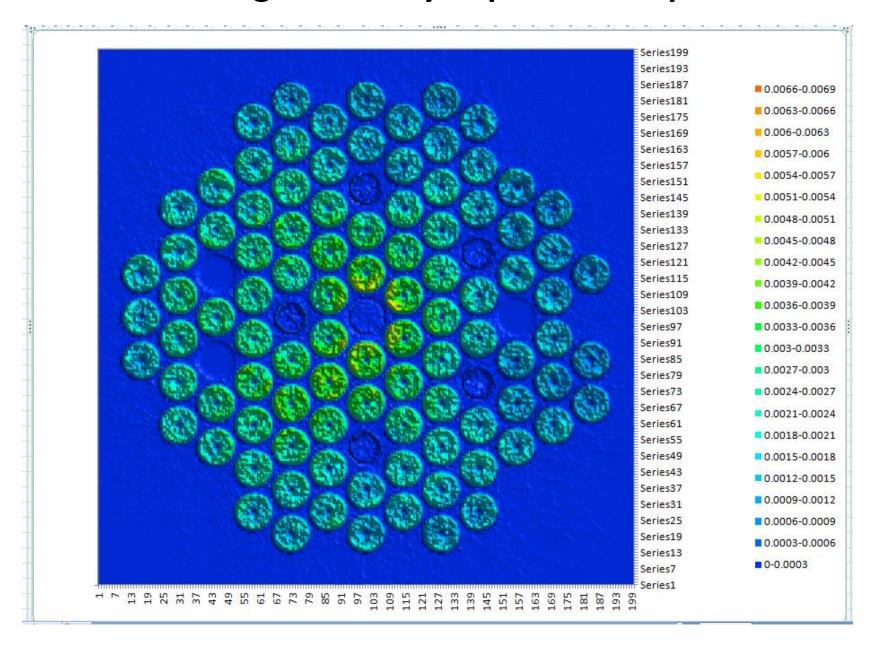
## **Visual Editor 3D Color plot of the fuel pins**



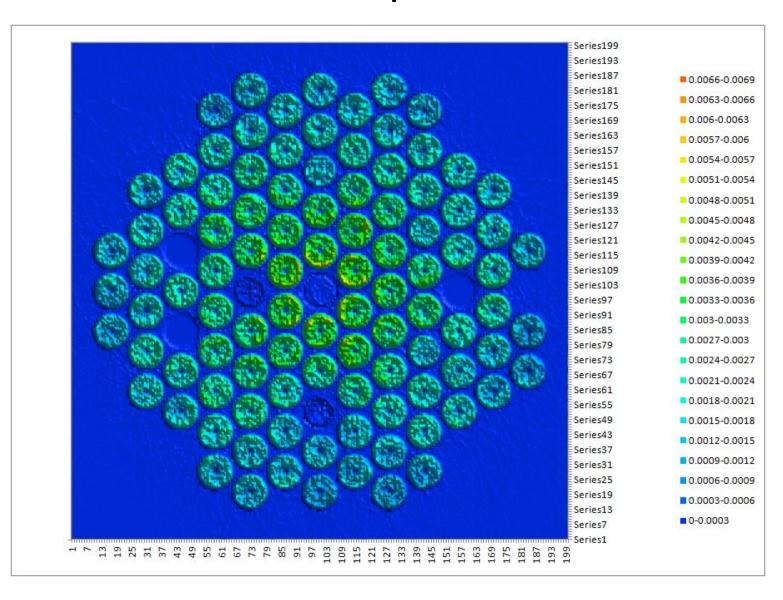
#### MCNP Flux mesh tally imported and plotted in Excel



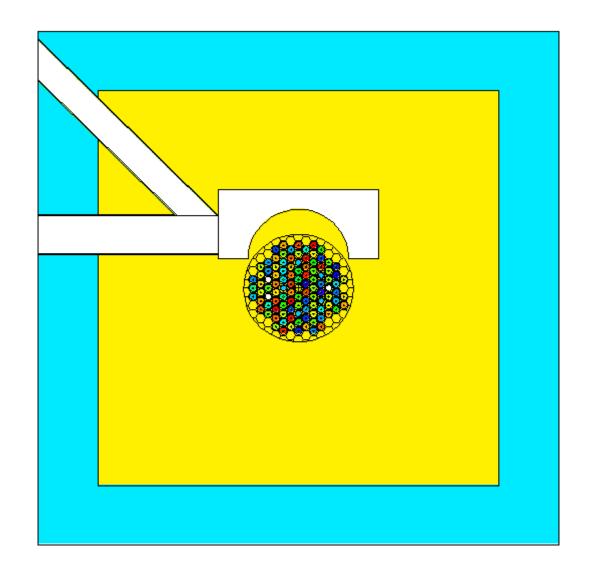
#### MCNP Heating mesh tally imported and plotted in Excel



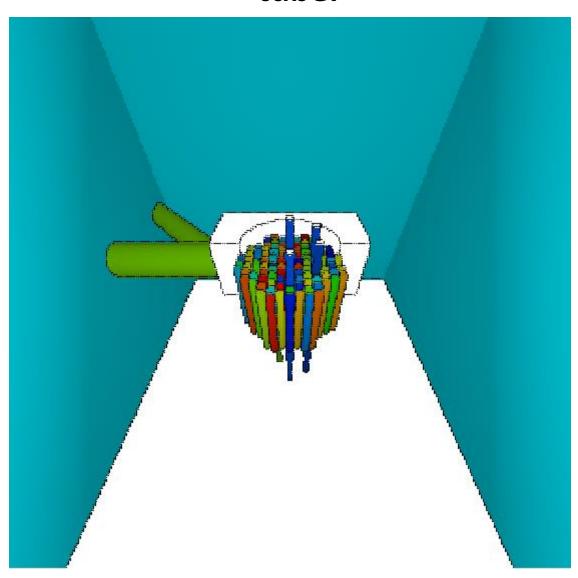
## MCNP Heating mesh tally with control rods pulled 20 cm imported and plotted in Excel



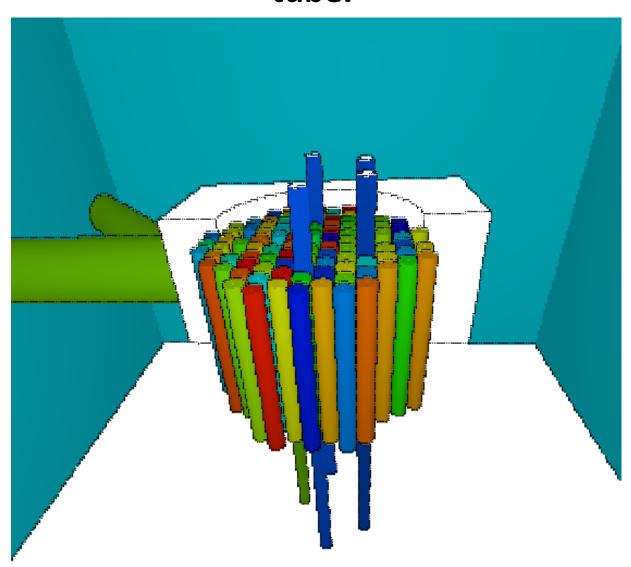
### Visual Editor plot of the beam ports for the reactor.



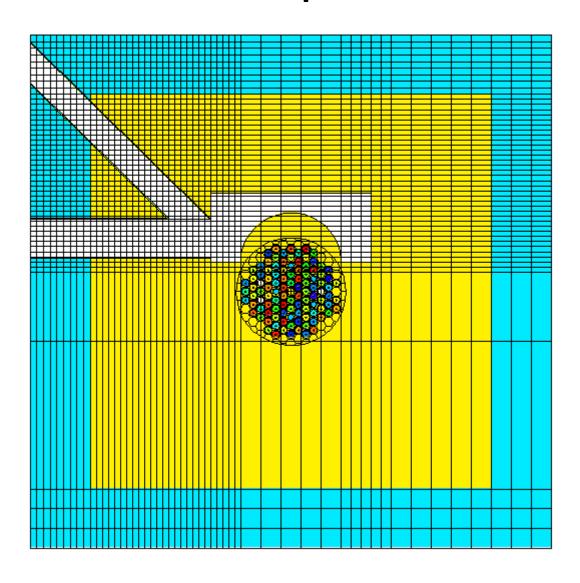
# 3D View of the reactor showing control rods and beam tube.



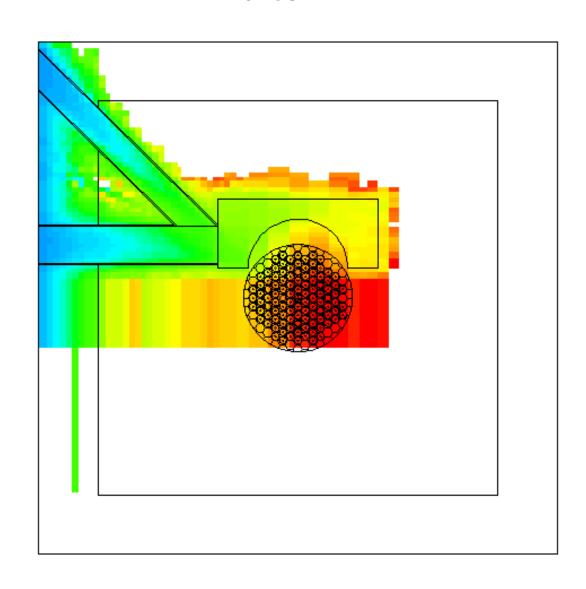
3D View of the reactor showing control rods and beam tube.



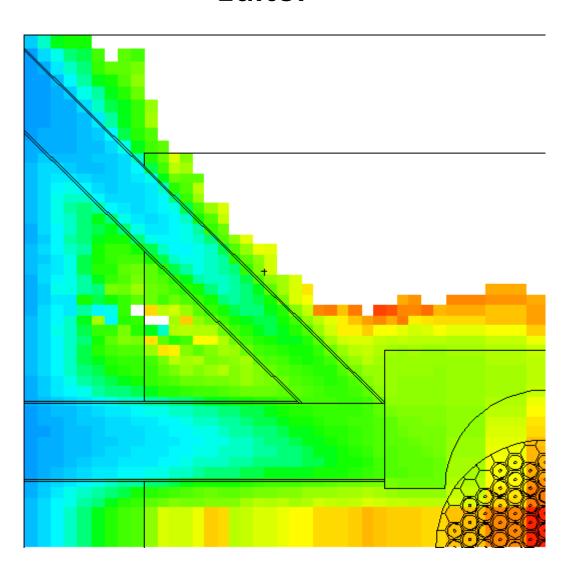
# Weight Window mesh added to bias particles down the beam ports.



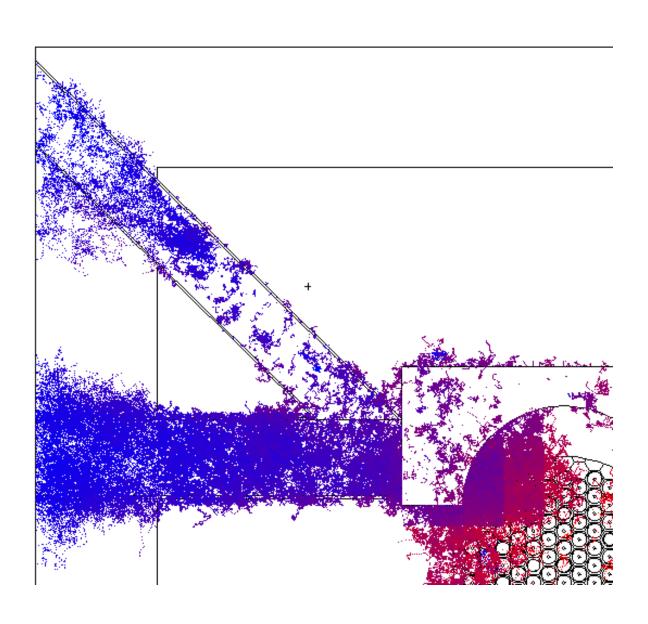
## Calculated weight window values plotted in the Visual Editor



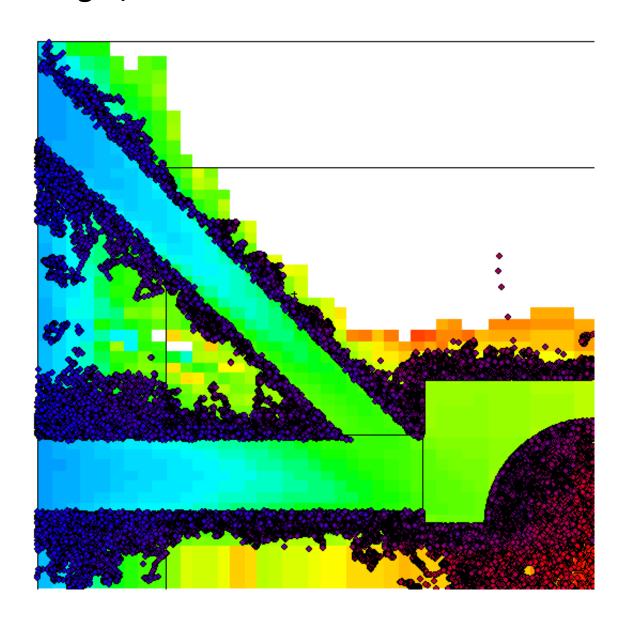
## Calculated weight window values plotted in the Visual Editor



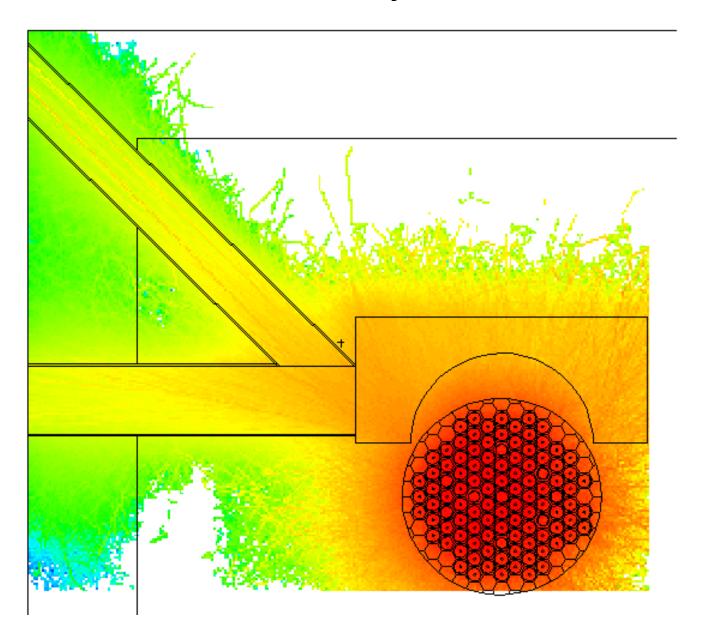
### Collisions that contribute to the tally colored by weight



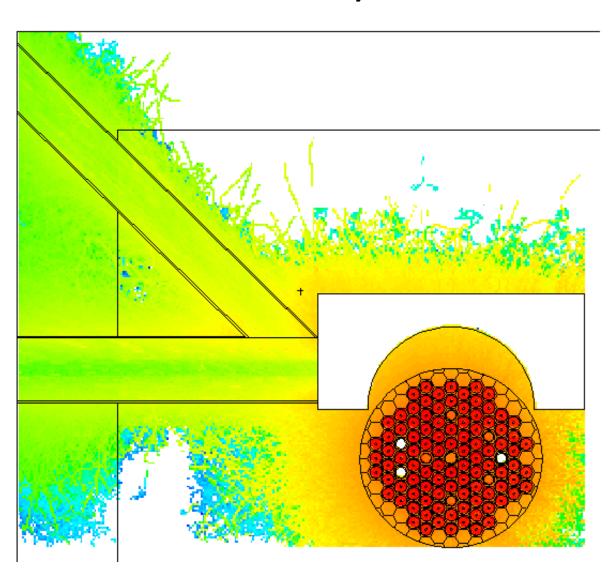
Collisions plotted on top of the weight window mesh, colored by particle weight, limited to the radius of the beam tubes.



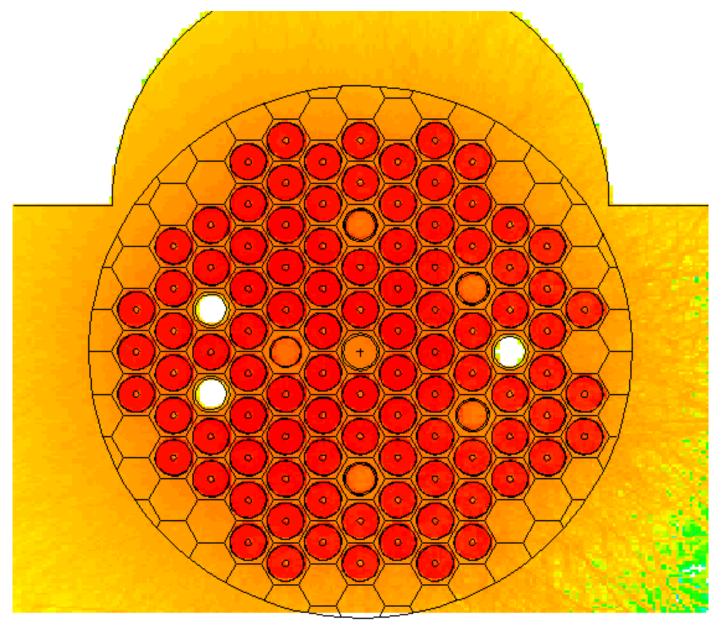
## **Flux Mesh Tally Plot**



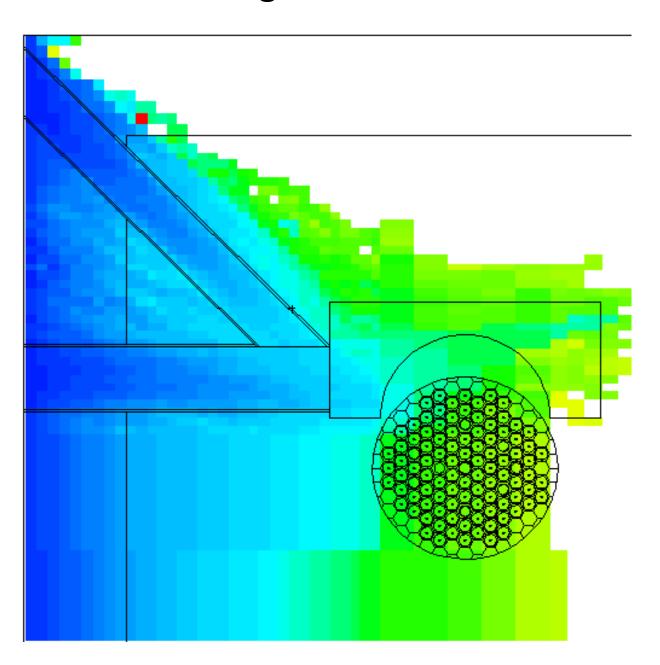
# **Energy Deposition Mesh Tally Plot Flux Mesh Tally Plot**



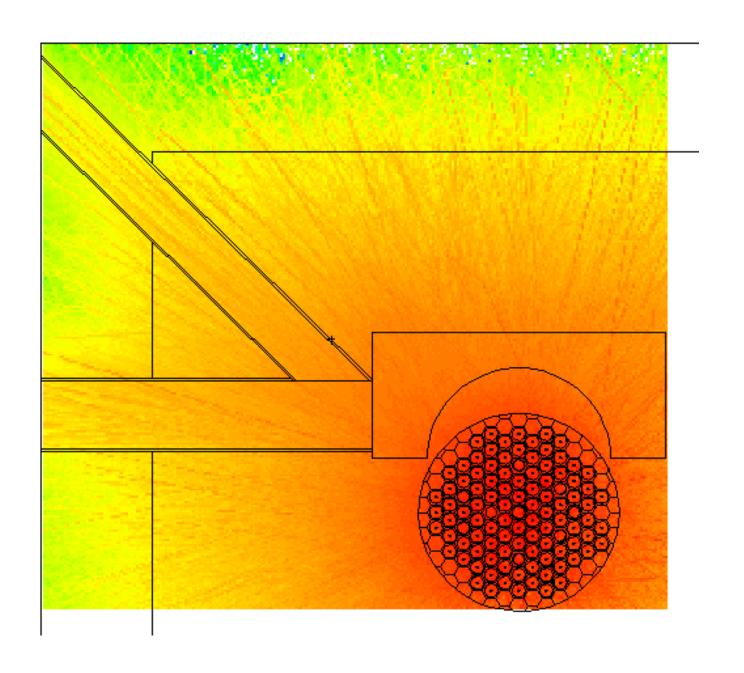
## **Energy Deposition Mesh Tally Plot in the Core**



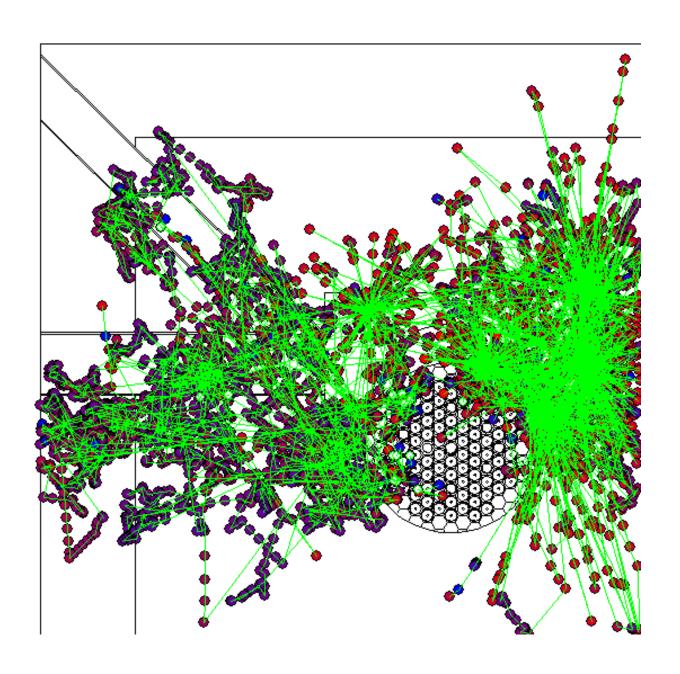
## **Photon Weight Window Mesh**



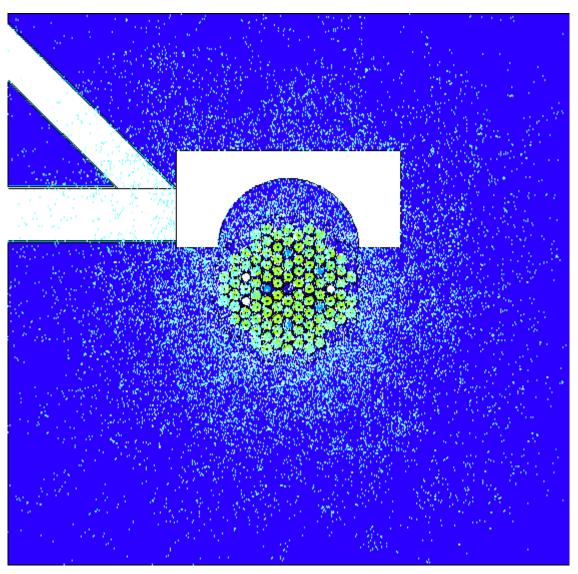
## **Photon Flux Mesh Tally**

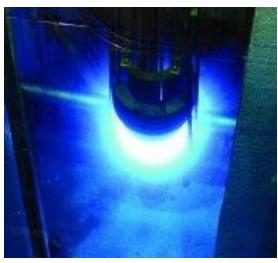


### **Biased Photon Tracks**

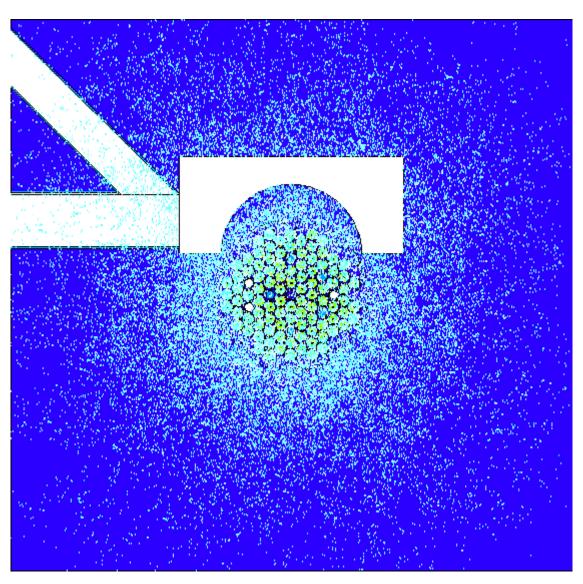


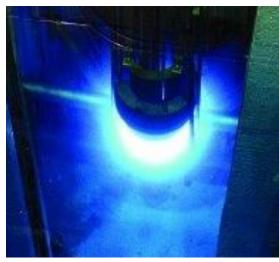
# Brehmstrahlung photons using FT CAP feature (50,000 neutrons)



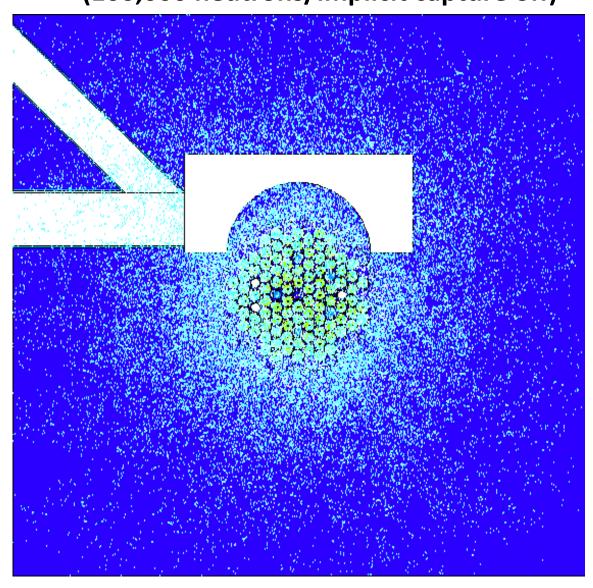


# Brehmstrahlung photons using FT CAP feature (100,000 neutrons)

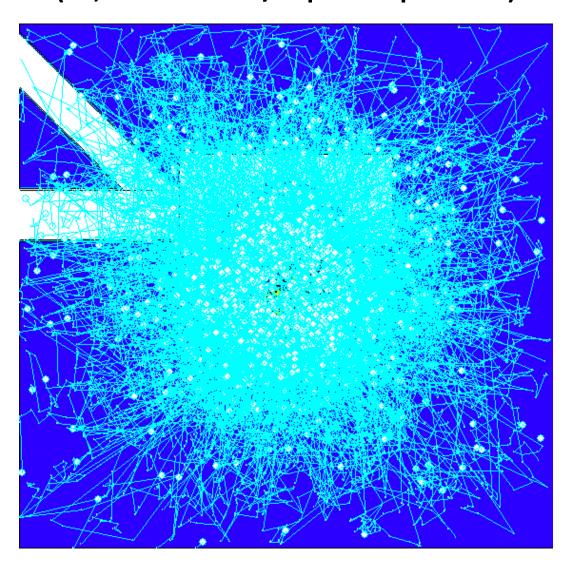




# Brehmstrahlung photons using FT CAP feature (100,000 neutrons/implicit capture off)



# Brehmstrahlung photons using FT CAP feature (50,000 neutrons/implicit capture off)



# Brehmstrahlung photons using FT CAP feature (100,000 neutrons/implicit capture off)