

# CeC Issues

D. Beavis

Sept. 16, 2015

# Agenda

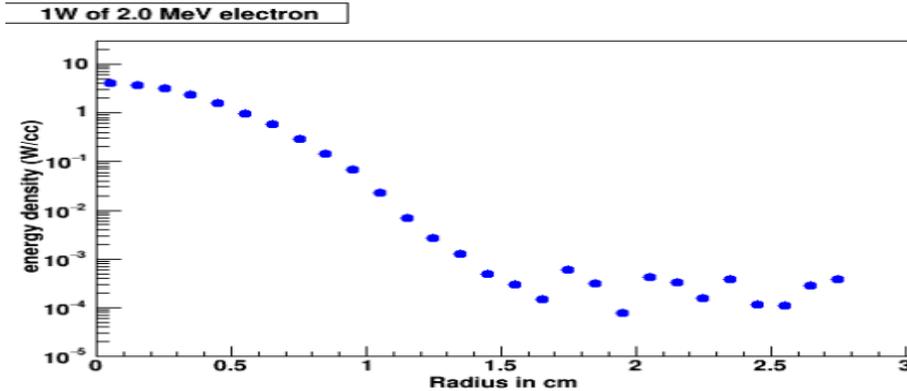
- Review final Layout
- Review operations scenario
  - 2 MeV beam
  - 22 MeV beam
- Review beam fault scenarios
  - Electron beam
  - Ion beam
- Low Power Beam Dump issues
- Expect another meeting in 1 week on issues

# Low Power Beam Dump

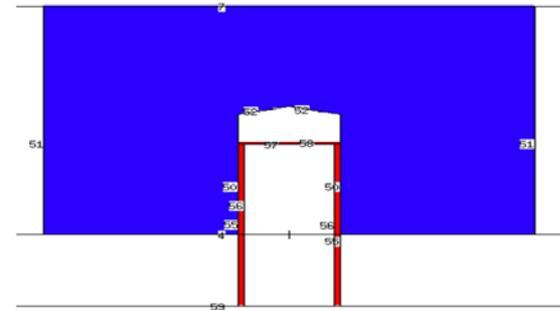
- Examined for 1 W at 2 and 22 MeV
- Dump heating
  - 56 degrees C for 2 MeV (window-C. Pai)
  - Delay thermal calculations for 22 MeV indefinitely
- Air activation not an issue
- Ozone not an issue
- Residual activity not an issue
- **Recommend we assign** a subgroup of two to review the technical details of the calculations.

# Input for Thermal Analysis to C. Pai

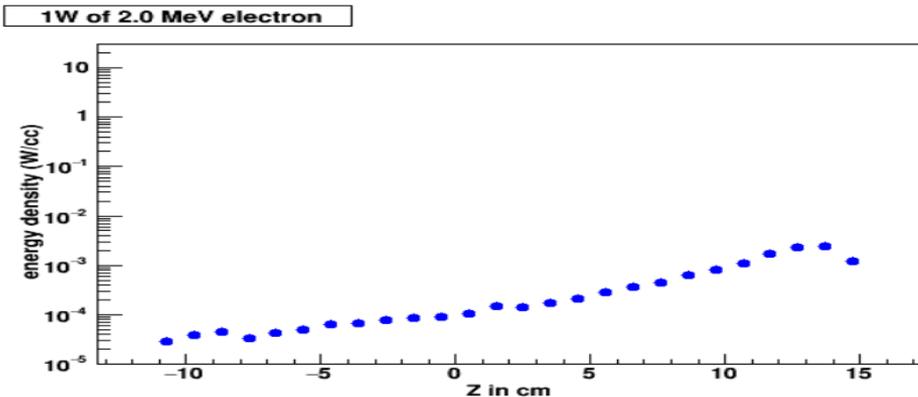
Window



98% of energy is in  
beam pipe and window

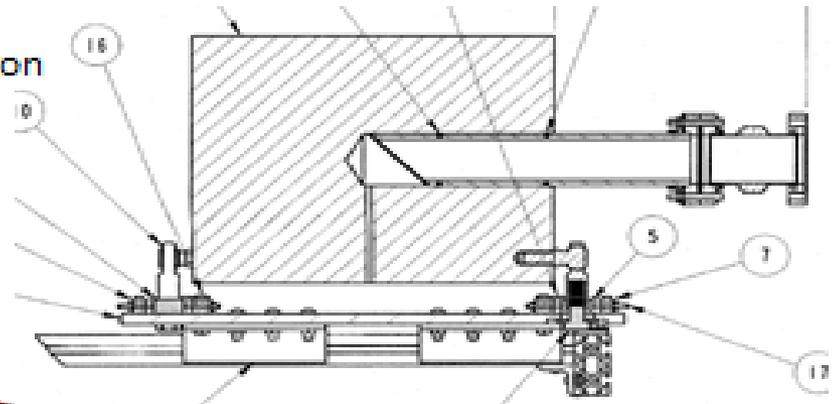


pipe

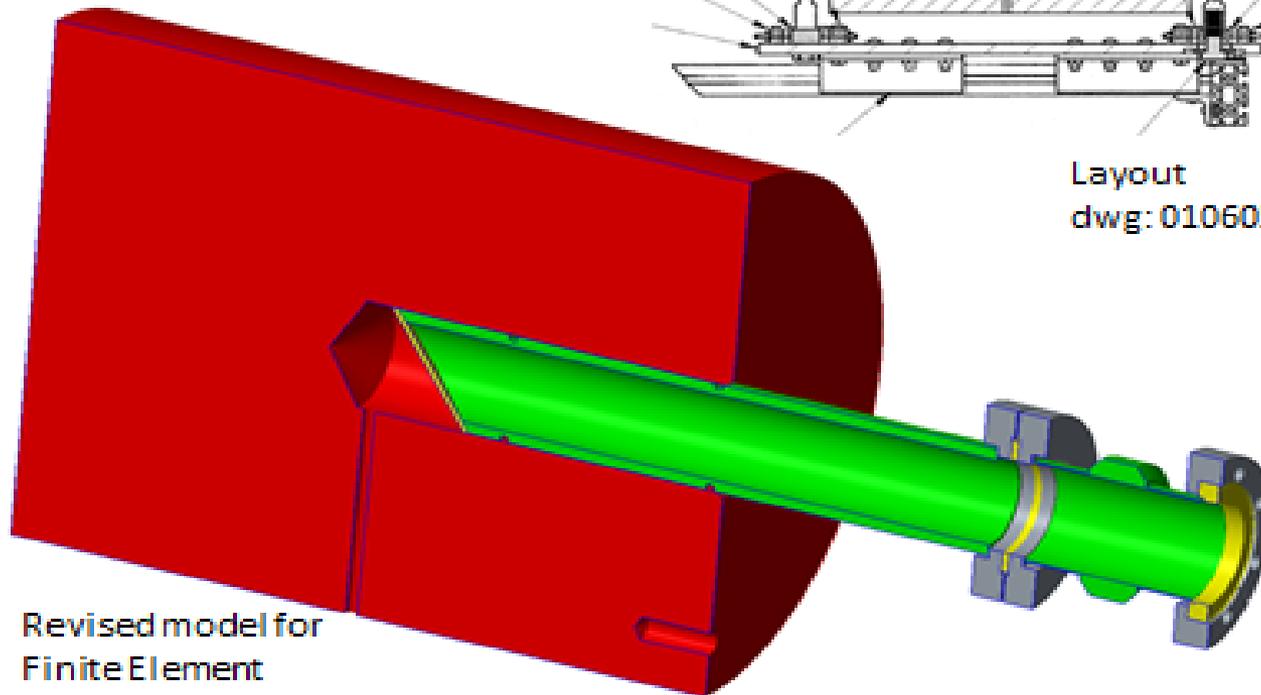


# Thermal Model (C. Pai)

CeC low power beam dump configuration



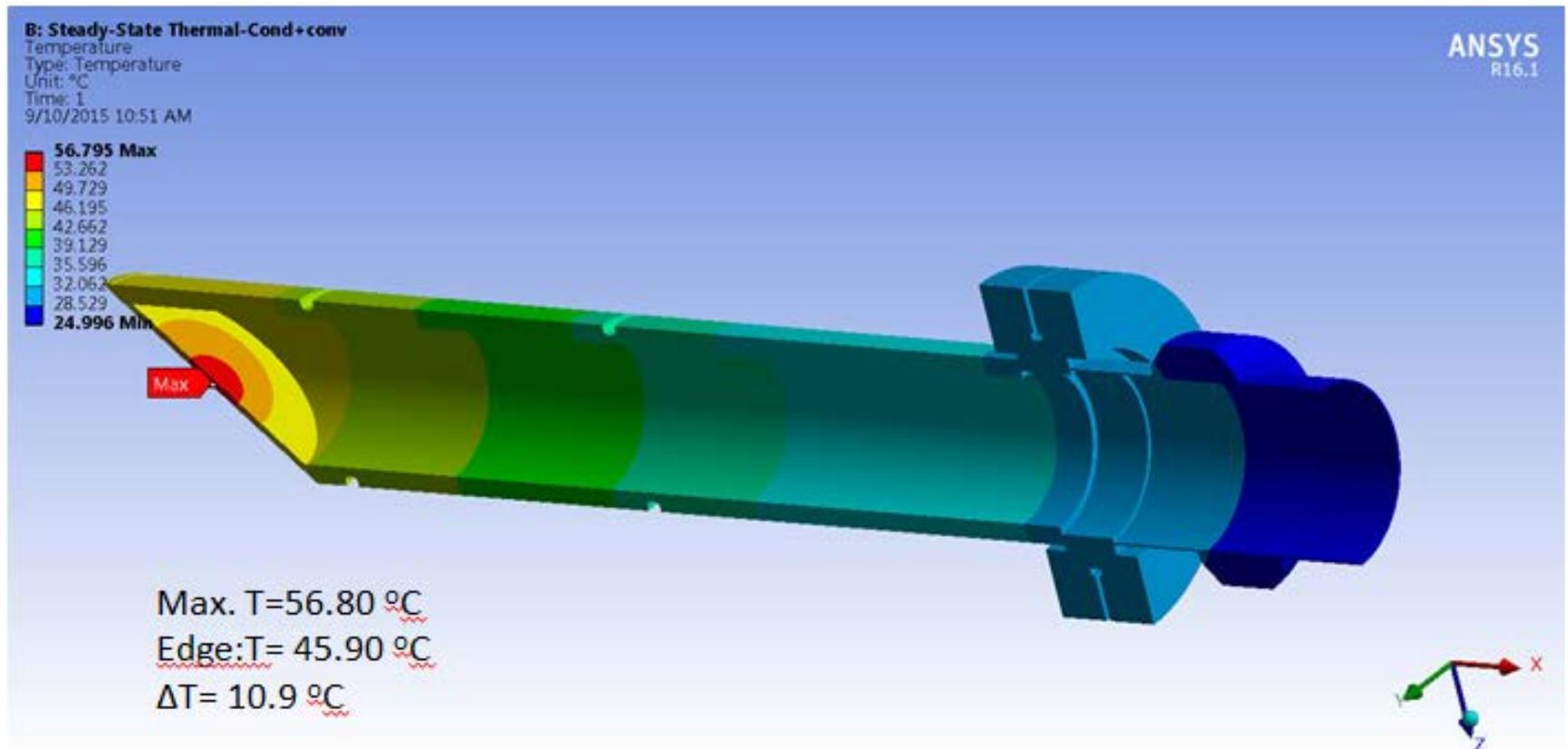
Layout  
dwg: 010605122



Revised model for  
Finite Element

010605122

# Thermal Result



# Future items

- Analysis of issue for water cooled beam dump
- Penetrations for 22 MeV
- Any open beam fault issues