# FGT / HFT Integration Issues

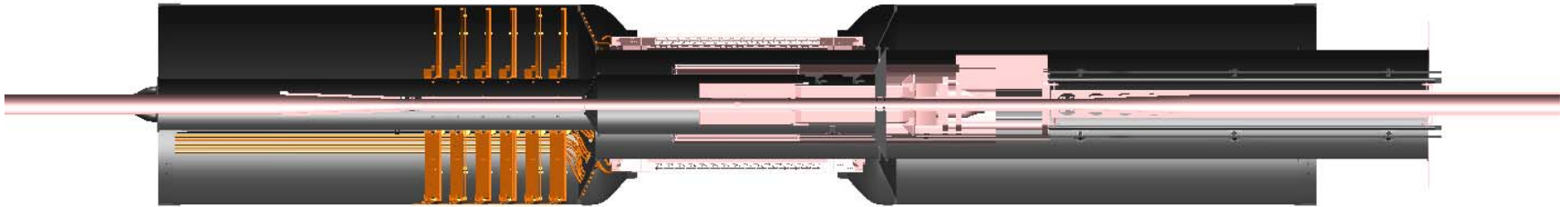$$\int_{E}^{W} f\big(g(t)\big)\cdot h\big(f(t)\big)\cdot i \cdot ds$$

J. Bessuille, MIT-Bates

10 March 2010

# Outline

- FGT overview and accessibility

- IDS mounting to the TPC

- SSD Services

- E-field shroud
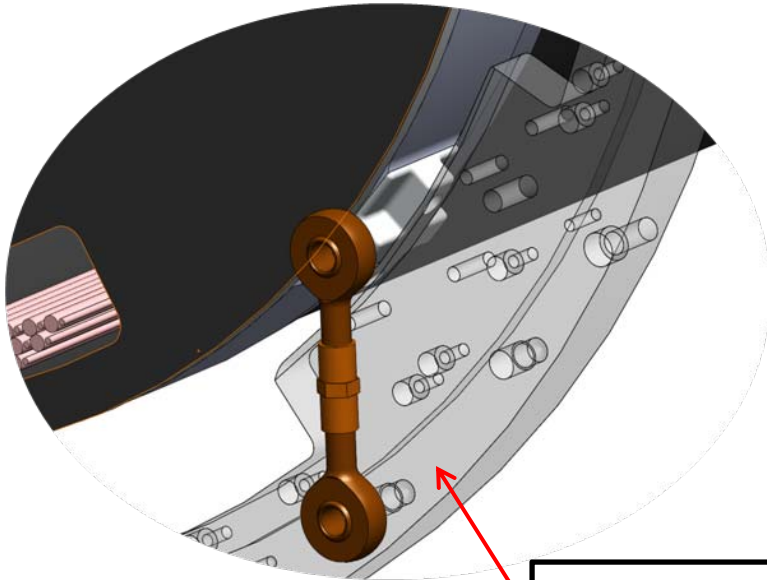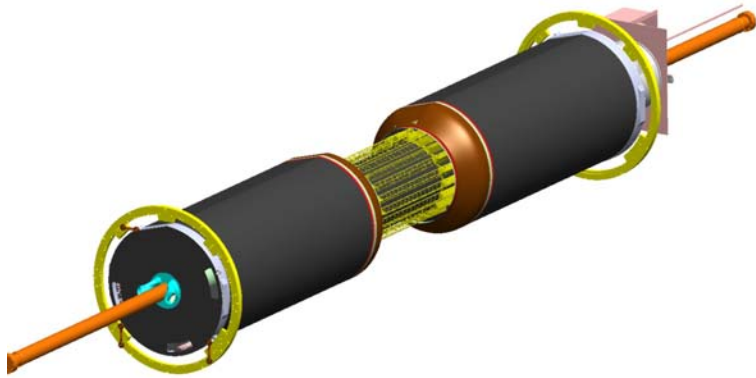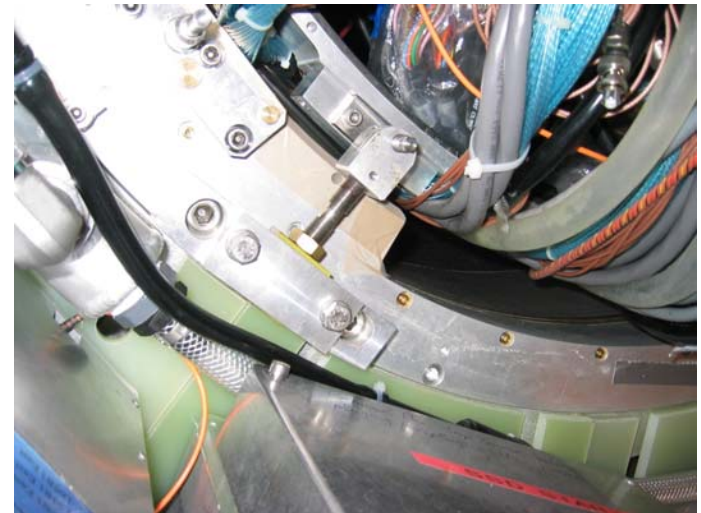
- Beam pipe support

# FGT Overview



- FGT consists of 6 disks that live in the WSC
  - Nearest disk at ~680 mm from IP
  - This drives the shape of the WSC / ESC
- All services and cooling through west end only
- Will be installed in 2011 (Run 11)
- Designed so that each disk is independently serviceable while installed in STAR

# Inner detector support

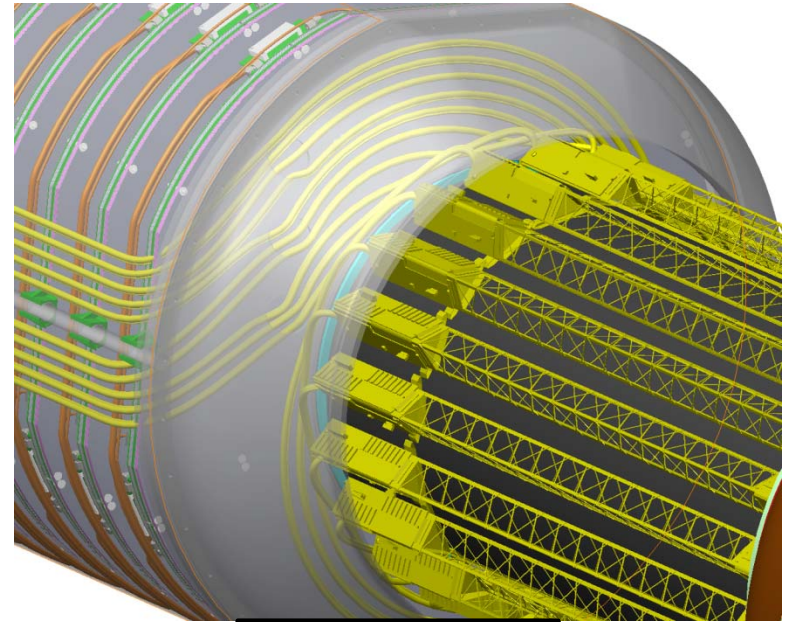- IDS will be supported using quasi-kinematic 4-2-1 interface to TPC
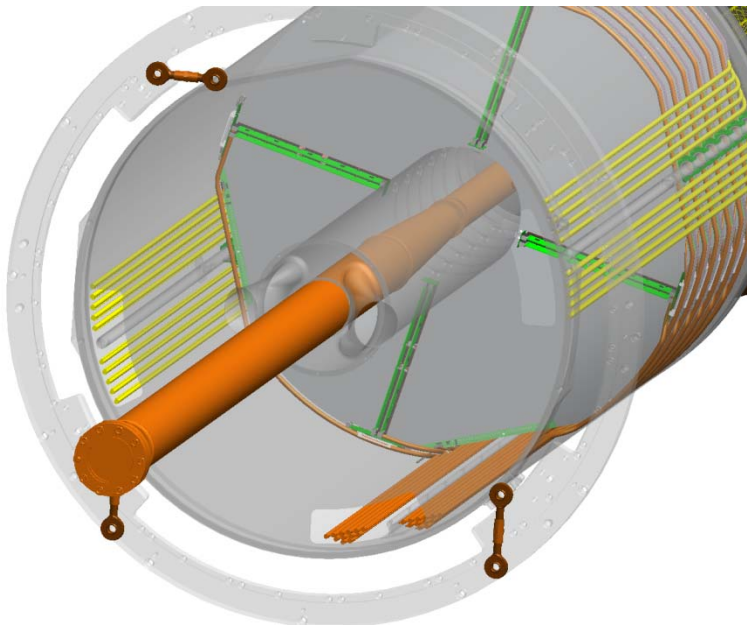




IFC End Ring
(Read: TPC)



Existing SVT support

# Services Routing

- SSD power and signal cables run the length of the WSC in 2 of the 3 gaps around FGT
  - These must be installed prior to run 11 while we have easy access to the WSC
- West end of cables will likely connect to a patch panel located on the TPC

East end of WSC

West end of WSC

E-field Shroud

WSC

Flexible seal

PST

Floating BP support