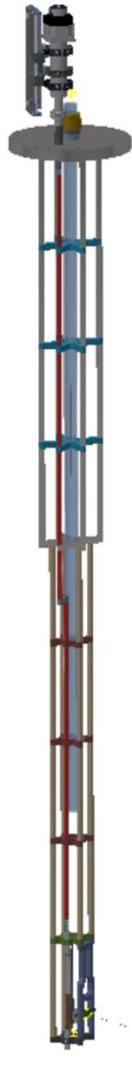
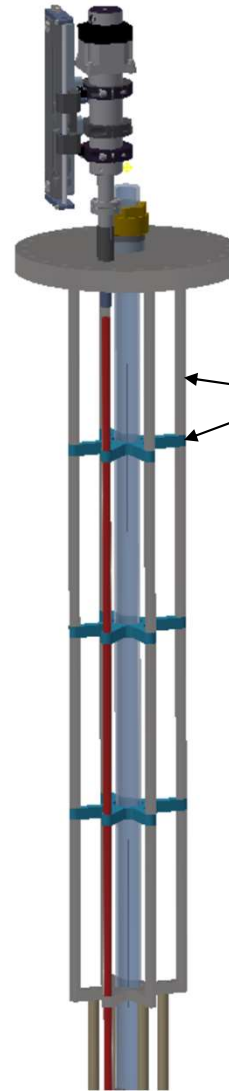


2.2m

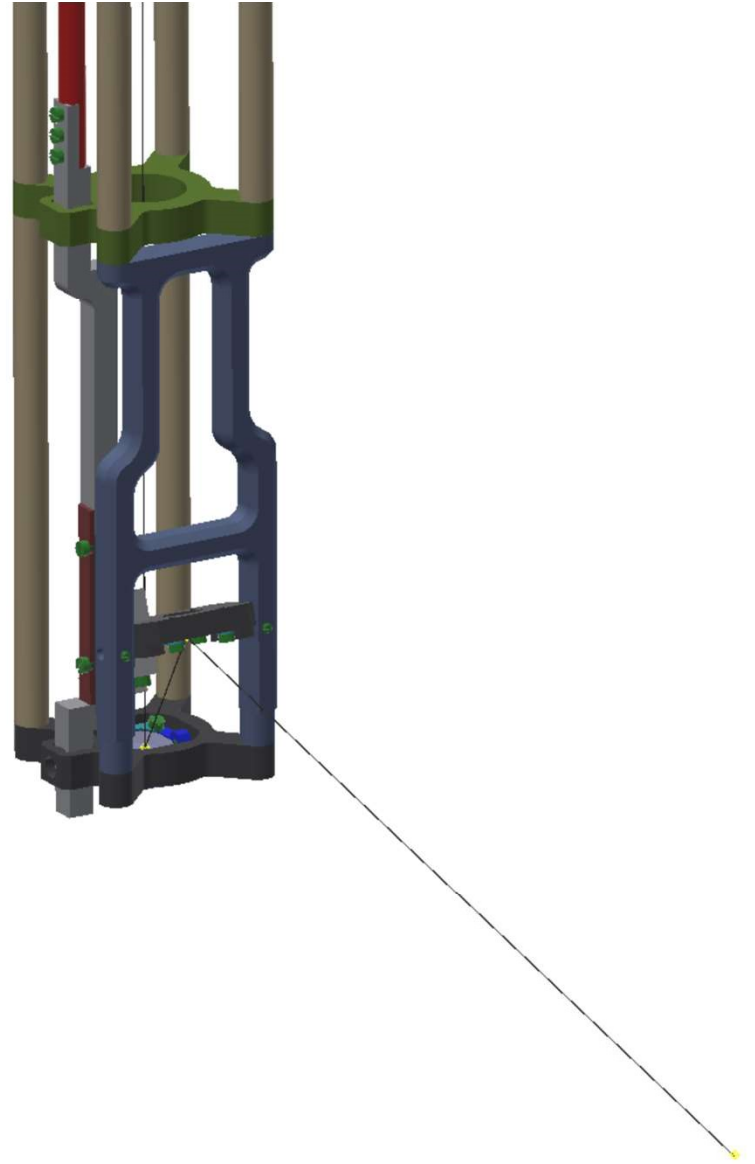
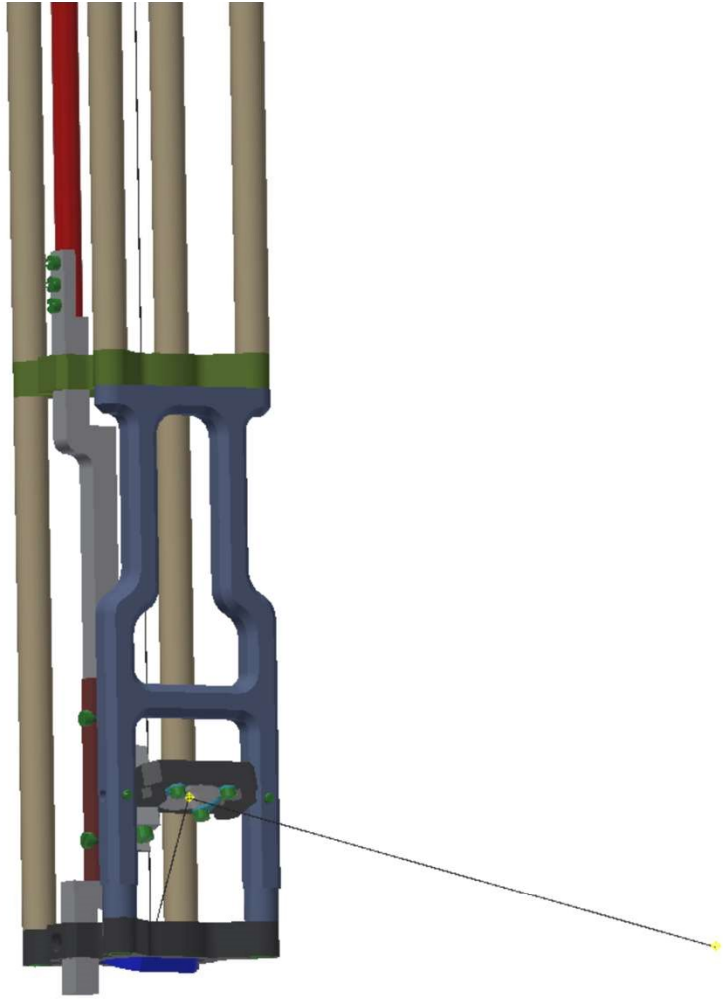


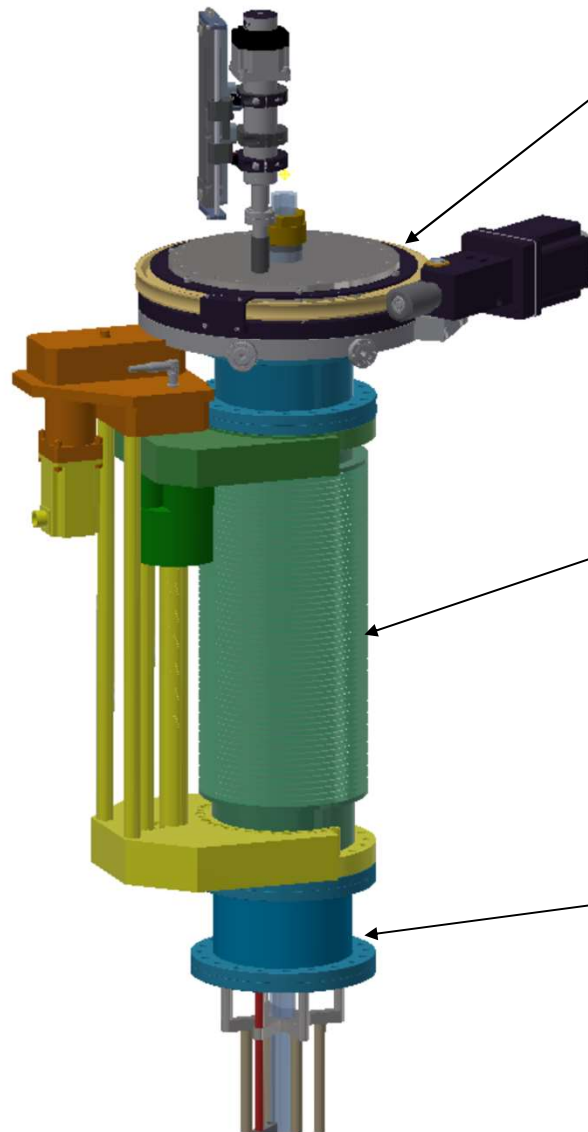
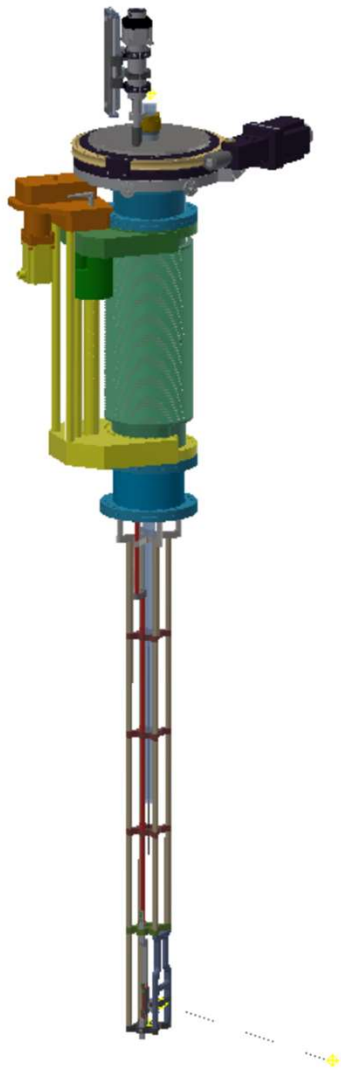
Placeholder Laser  
Periscope Insert  
Actual ProtoDUNE  
insert is about 1m  
longer



Propose to change warm structure  
components material to stainless  
steel

- Elasticity modulus  $\sim 200\text{GPa}$  vs 4  
to  $14\text{GPa}$  for Peek or Torlon
- Less expensive

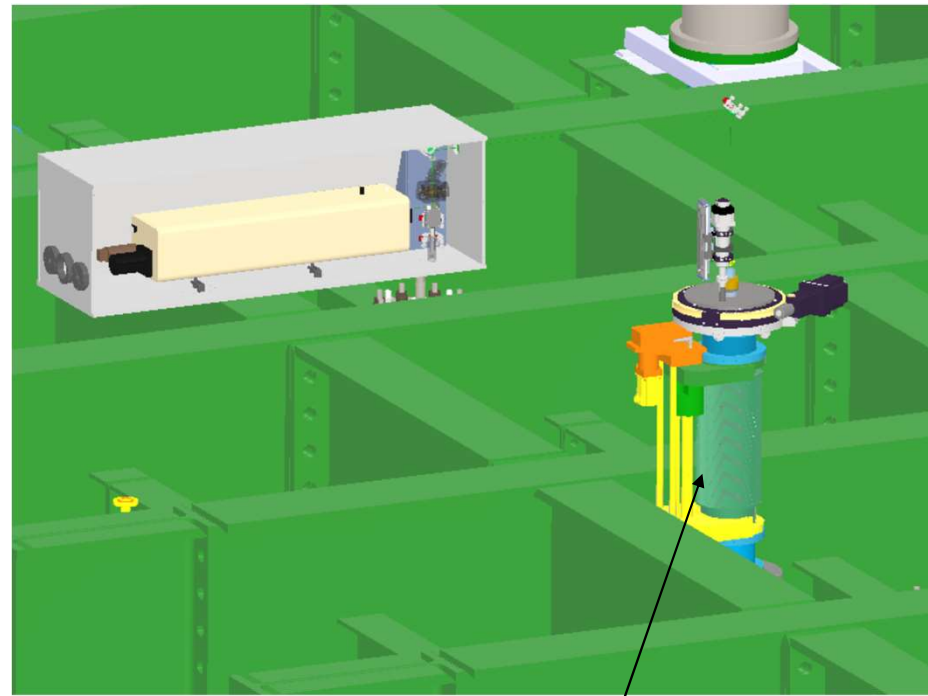
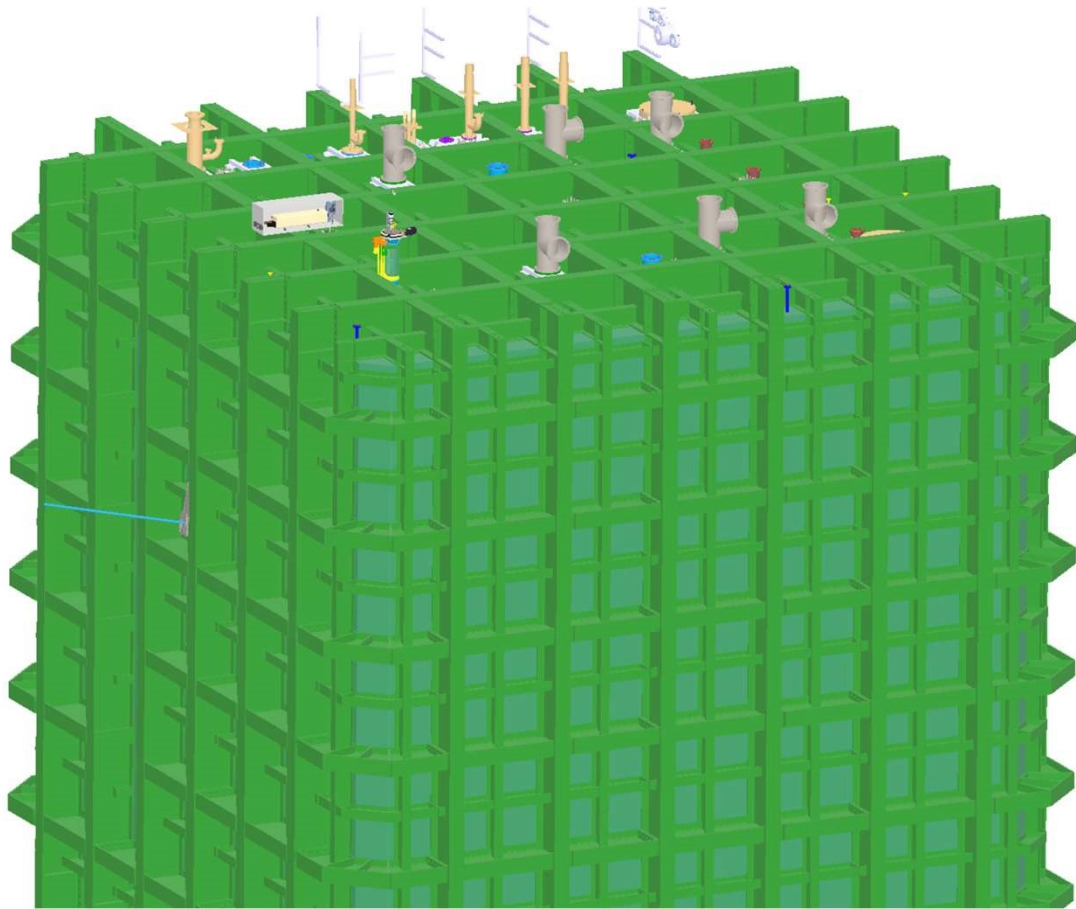




Rotation Stage – 10" version shown. Propose to go to 8" version

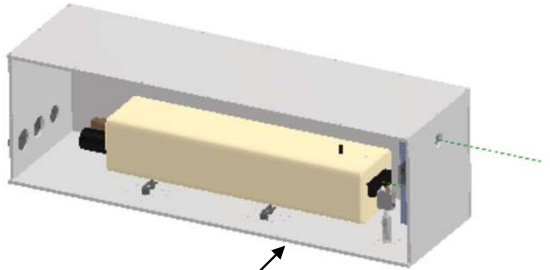
Linear translation stage – 300mm stroke, shown in retracted position

8" CF Adapter nipple



Laser Periscope

Possible Test setup at LANL



Class IV Laser, top shown 2.5m above floor

NMSU Vacuum Insulated Dewar  
ø760mm x 1130 mm high



2.25m

