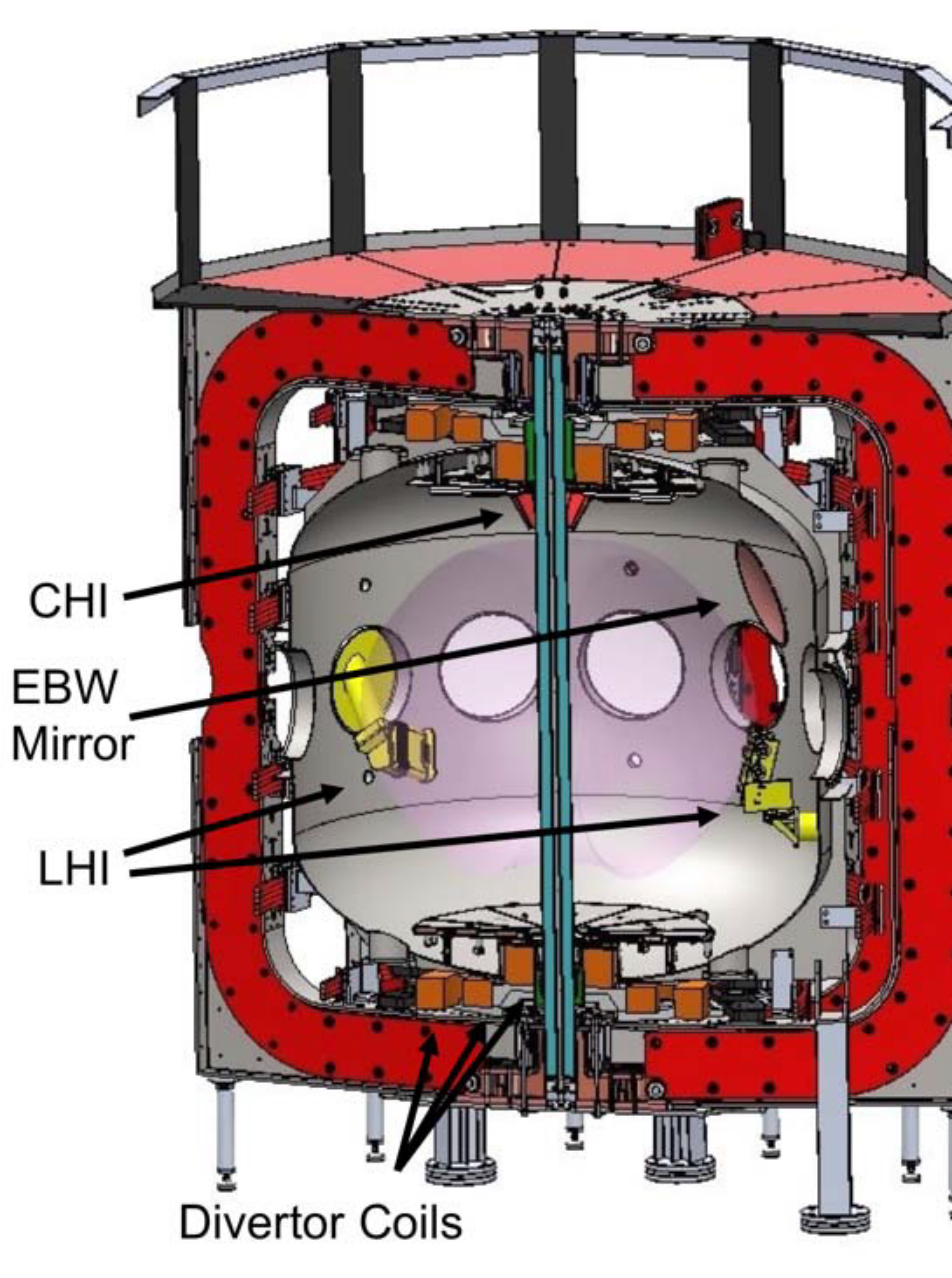
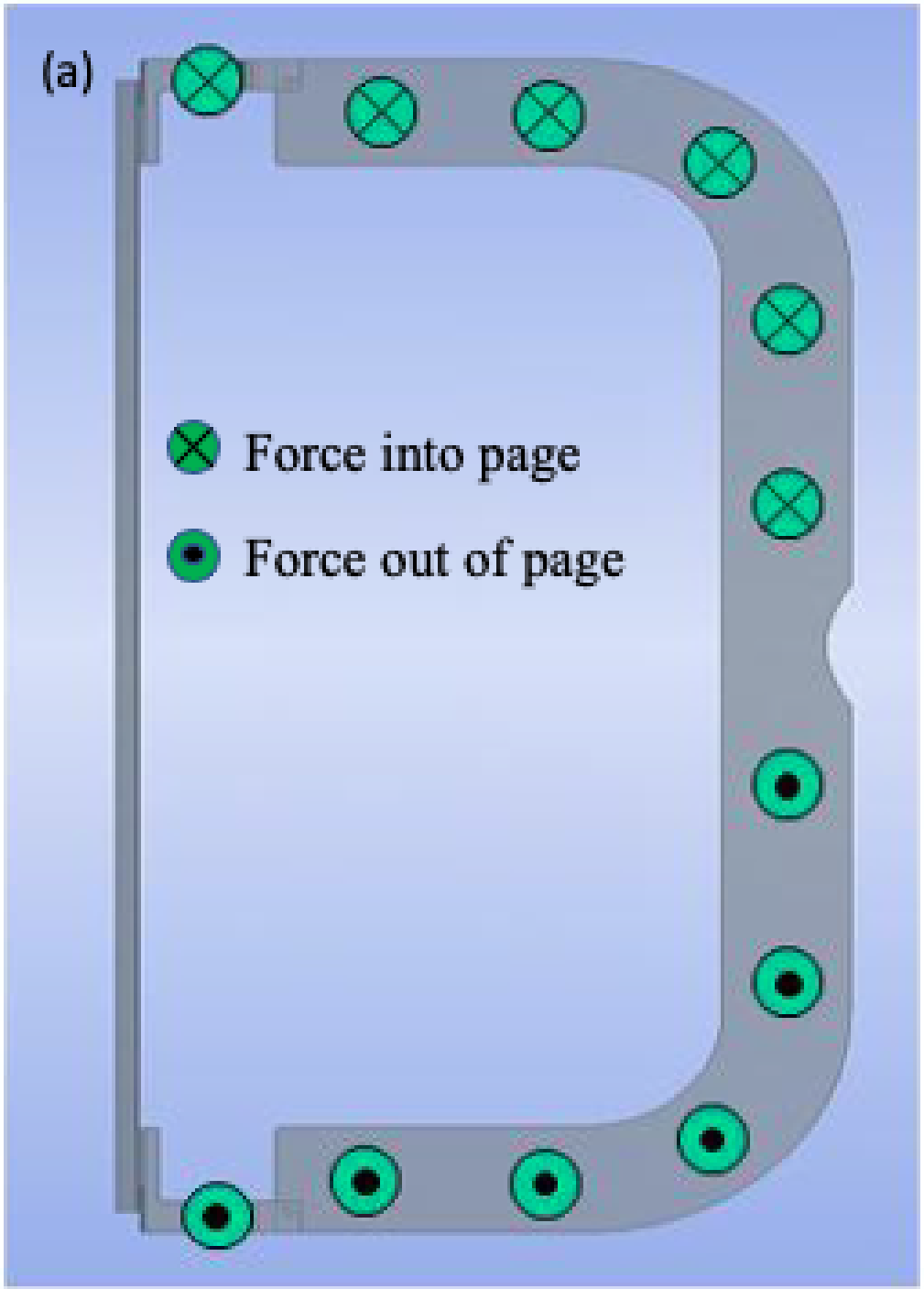
Title: Public Data Set: The New Pegasus-III Experiment

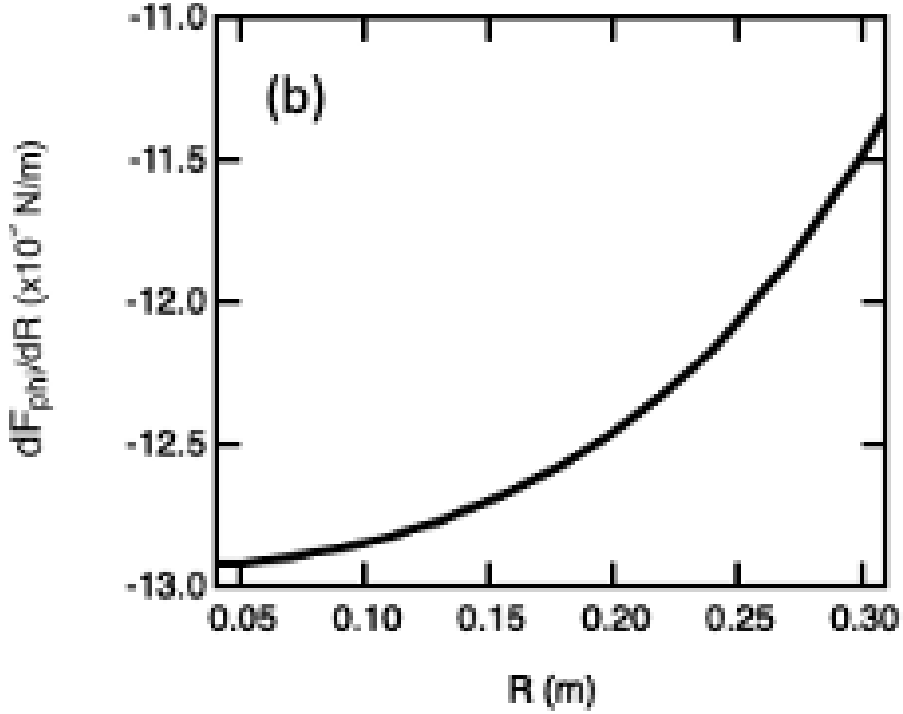
Authors: A.C. Sontag, M.W. Bongard, M.T. Borchardt, S.J. Diem, R.J. Fonck, A.K. Keyhani, B.A. Kujak–Ford, B.T. Lewicki, M.D. Nornberg, A.C. Palmer, C. Pierren, J.A. Reusch, A.T. Rhodes, N.J. Richner, C. Rodriguez Sanchez, C.E. Schaefer, J.D. Weberski, and G.R. Winz

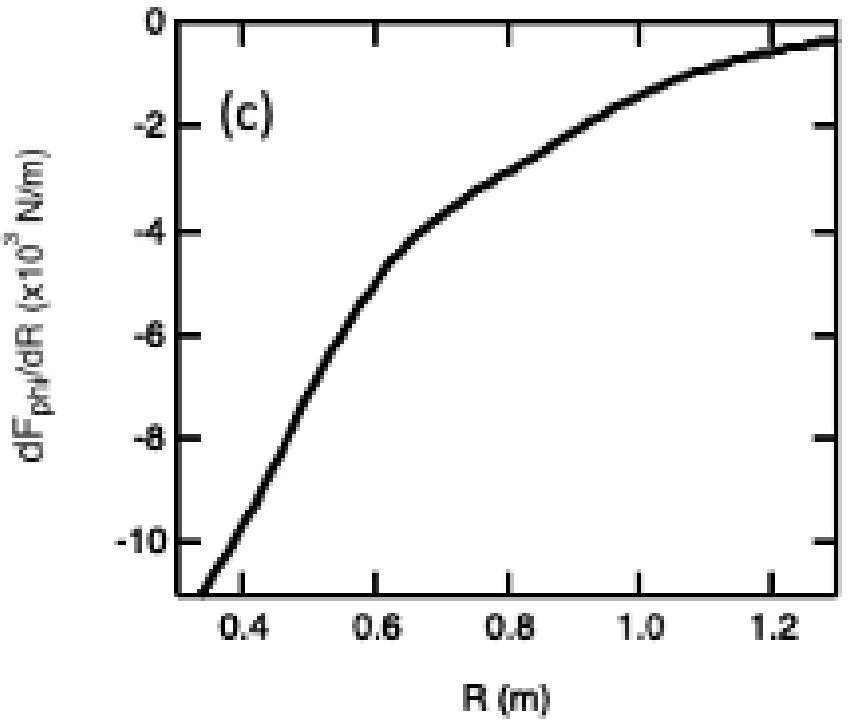
Release Date: 30 November 2022

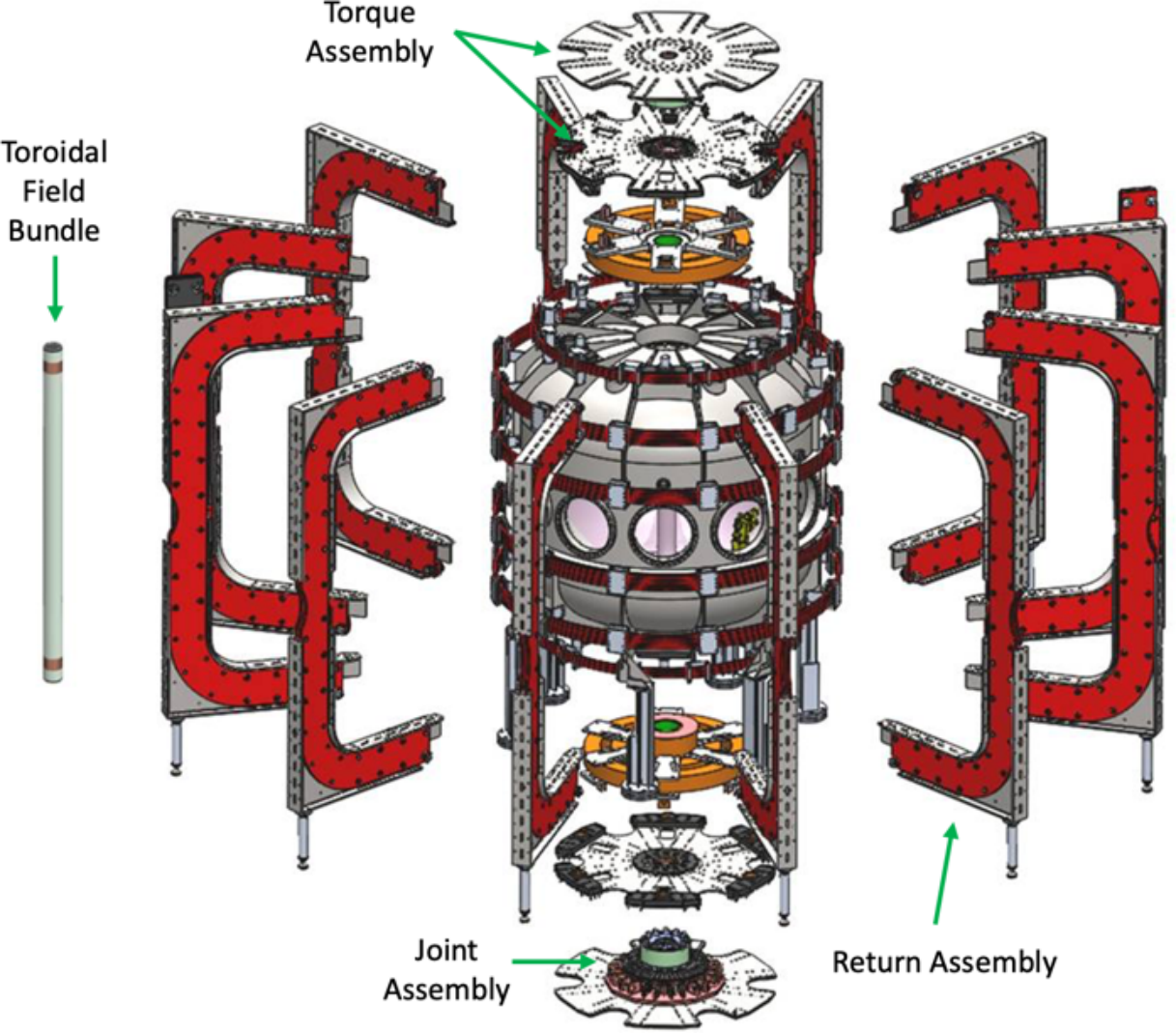
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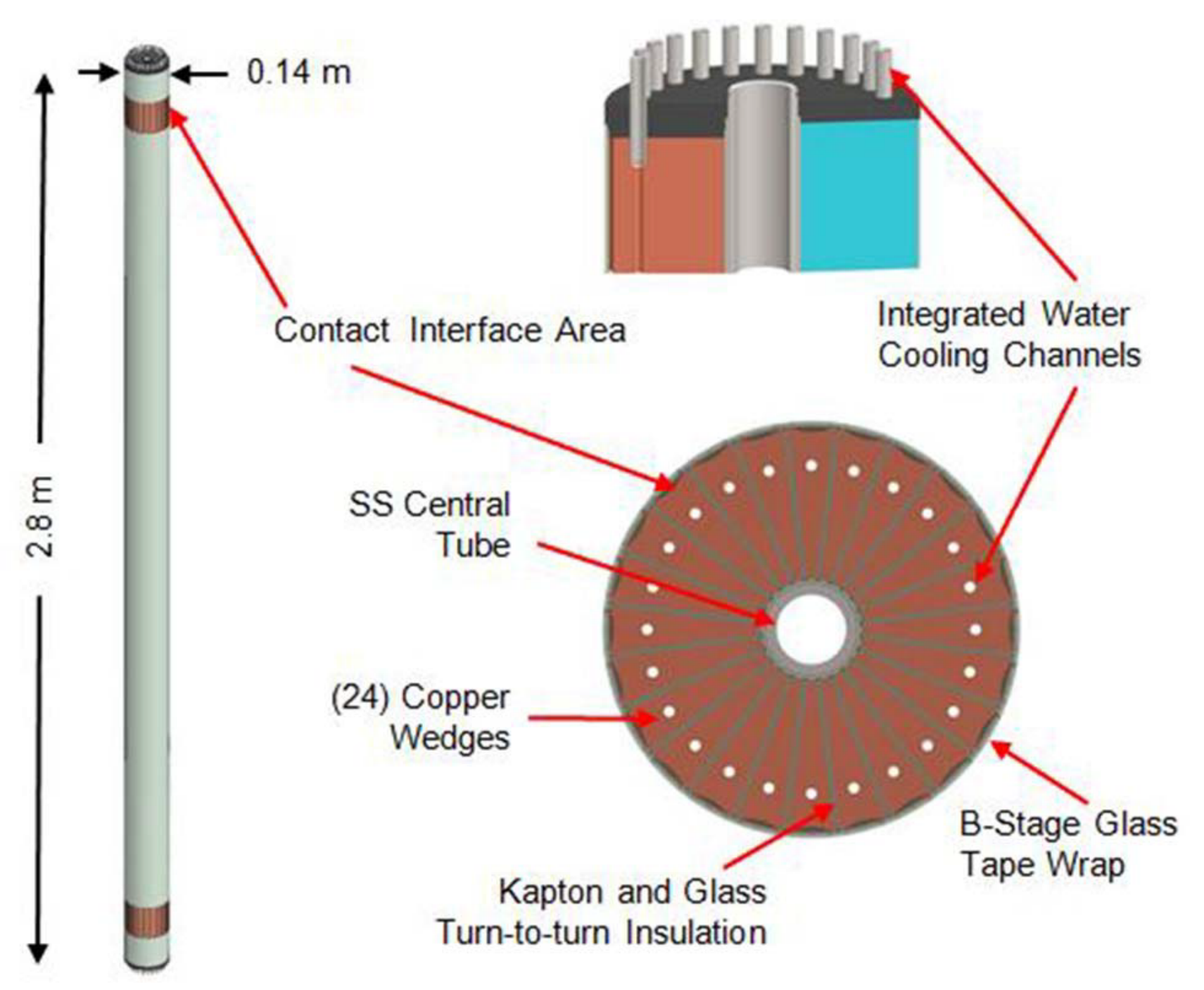

CHI
EBW
Mirror
LHI
Divertor Coils

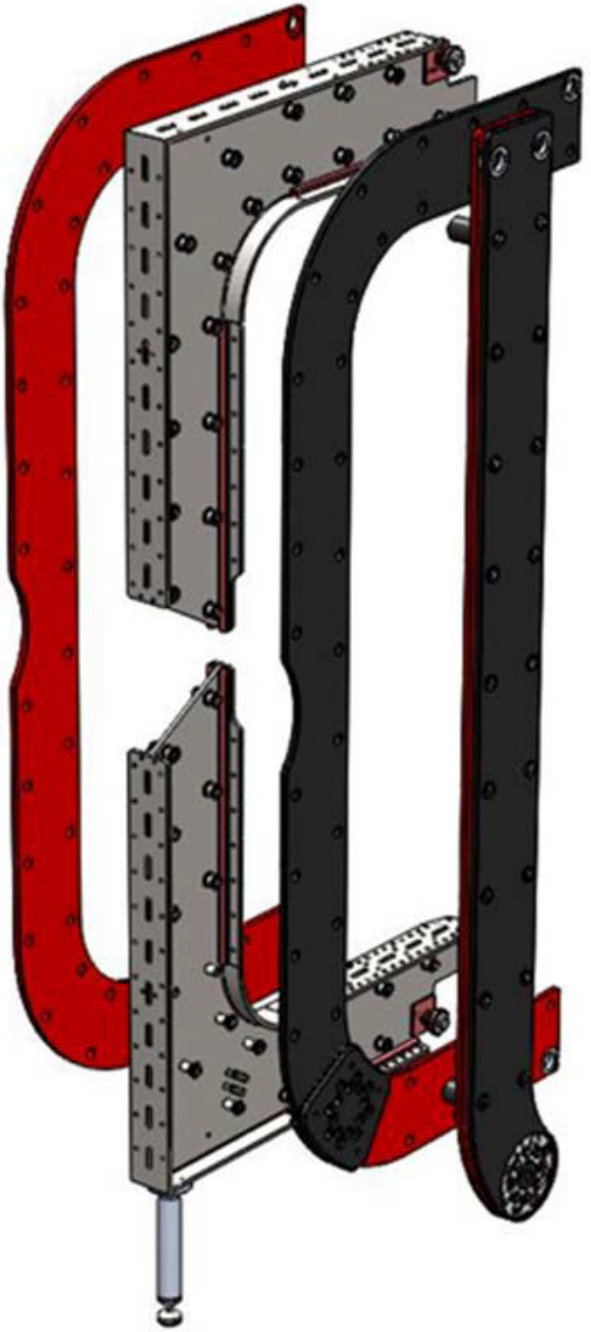

(a)
Force into page
Force out of page


(b)
-11.0
-11.5
-12.0
-12.5
-13.0
0.05
0.10
0.15
0.20
0.25
0.30
R (m)
dF_ph/dR (x10^-7 N/m)


(c)
0
-2
-4
-6
-8
-10
0.4
0.6
0.8
1.0
1.2
R (m)
dF_ph/dR (x10^-3 N/m)


Torque
Assembly
Toroidal
Field
Bundle
Joint
Assembly
Return Assembly

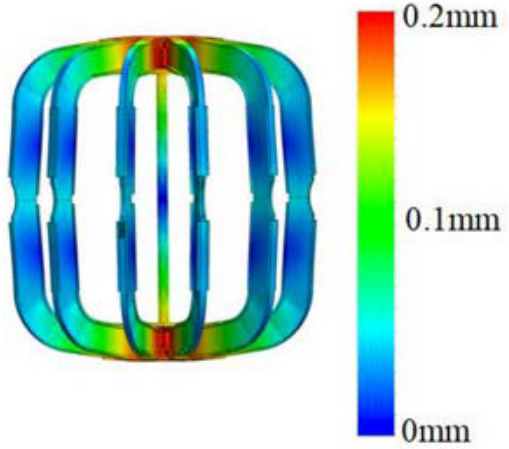

0.14 m
2.8 m
Contact Interface Area
Integrated Water Cooling Channels
SS Central Tube
(24) Copper Wedges
B-Stage Glass Tape Wrap
Kapton and Glass Turn-to-turn Insulation

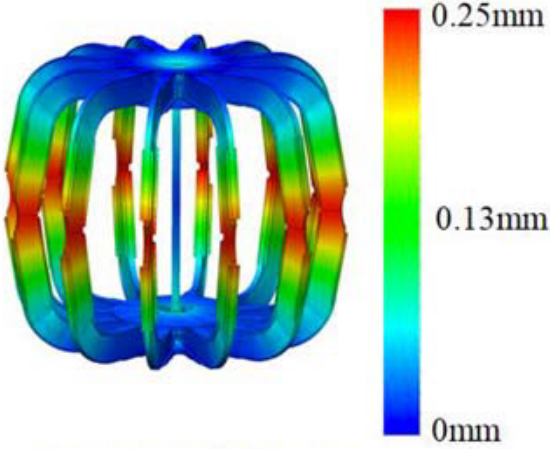


Ambient Temperature

$B_T = 0.6T$

$T = 25C$

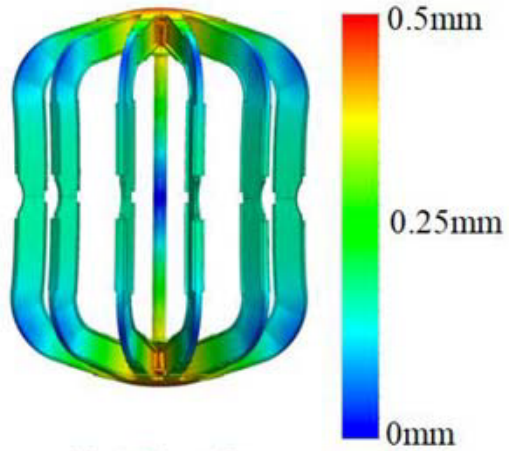




Pre-Chilled Bundle

$B_T = 0.6T$

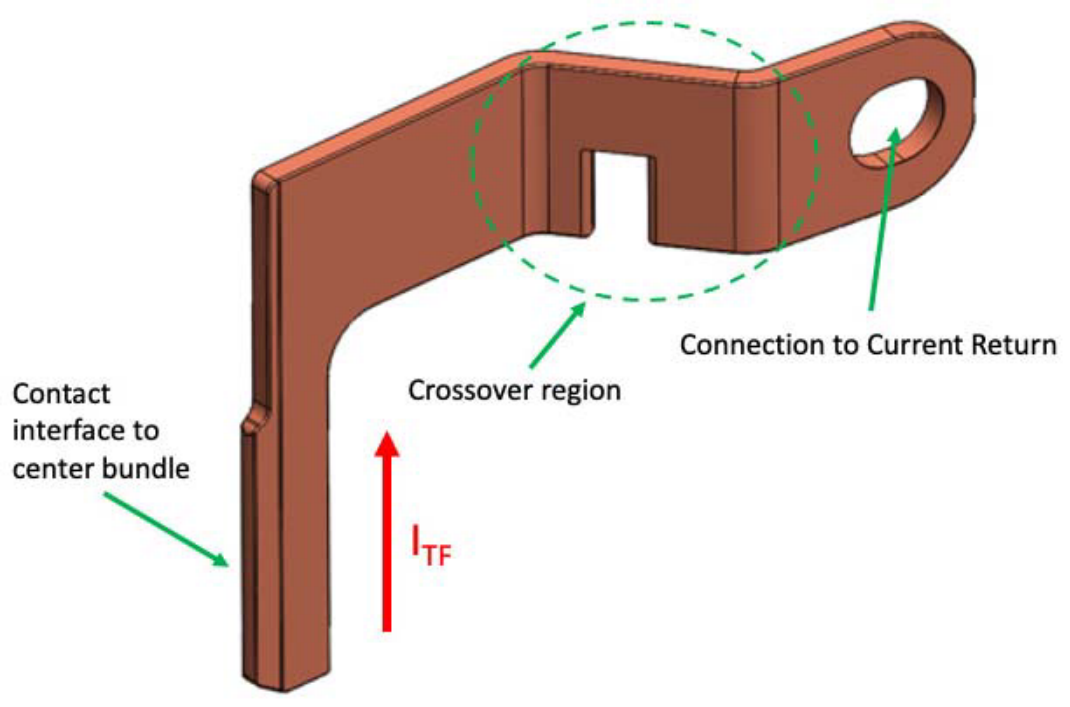
$T = 10C$

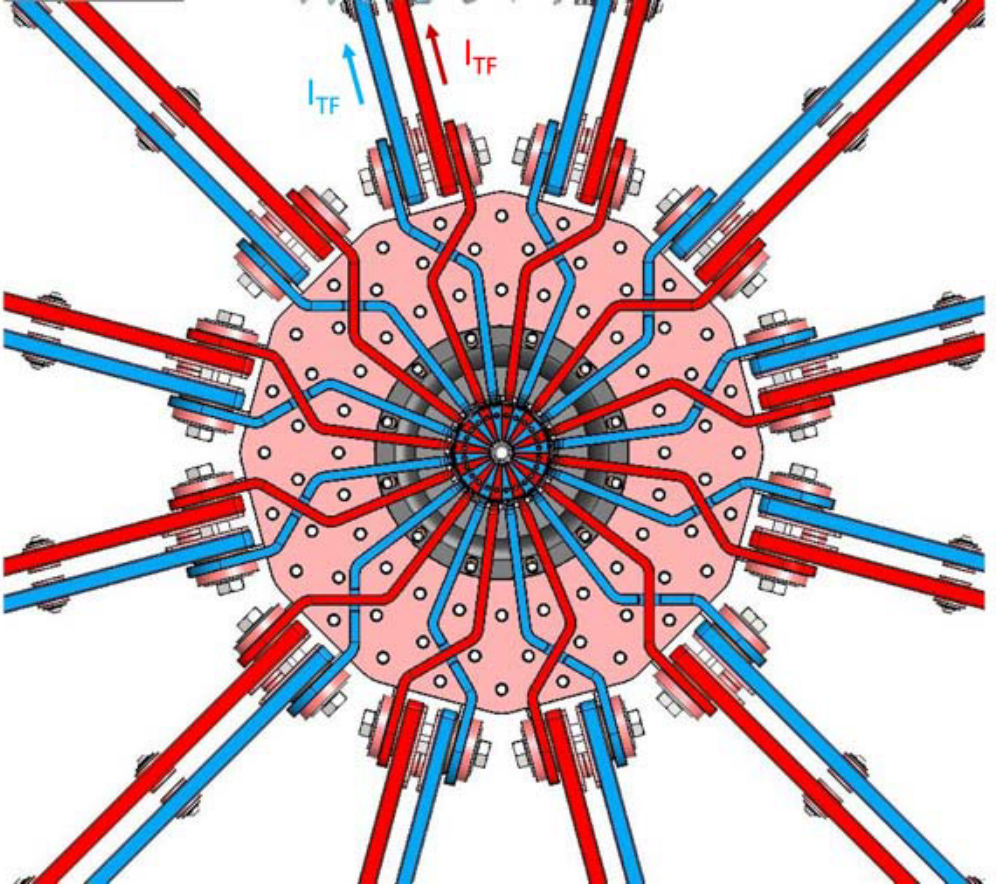


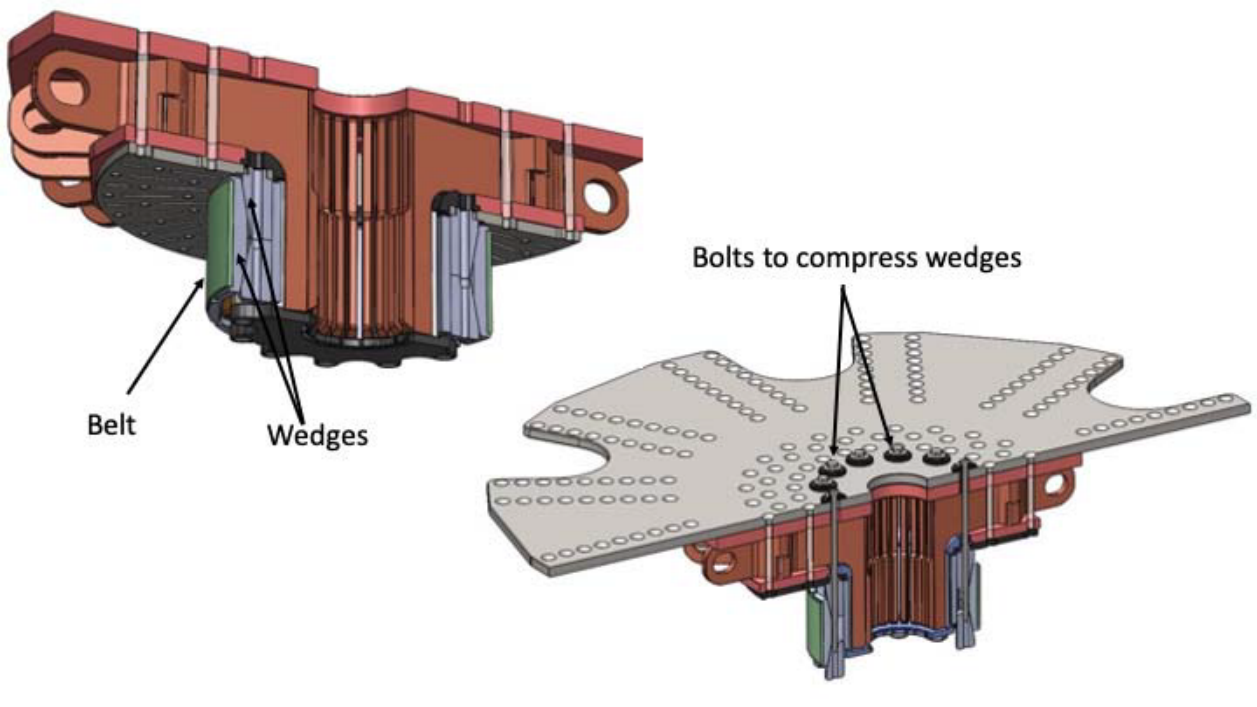
Hot Bundle

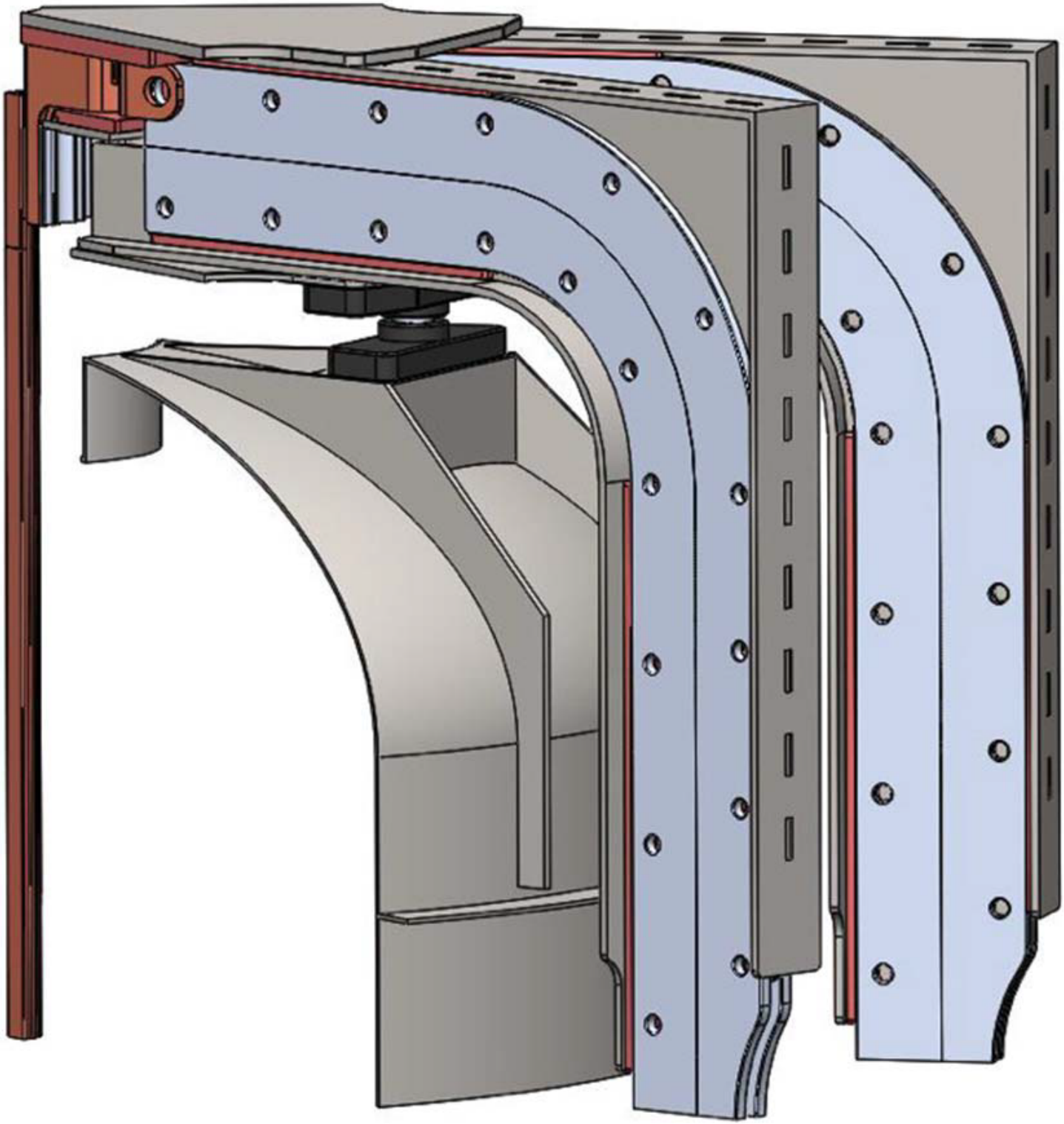
$B_T = 0.6T$

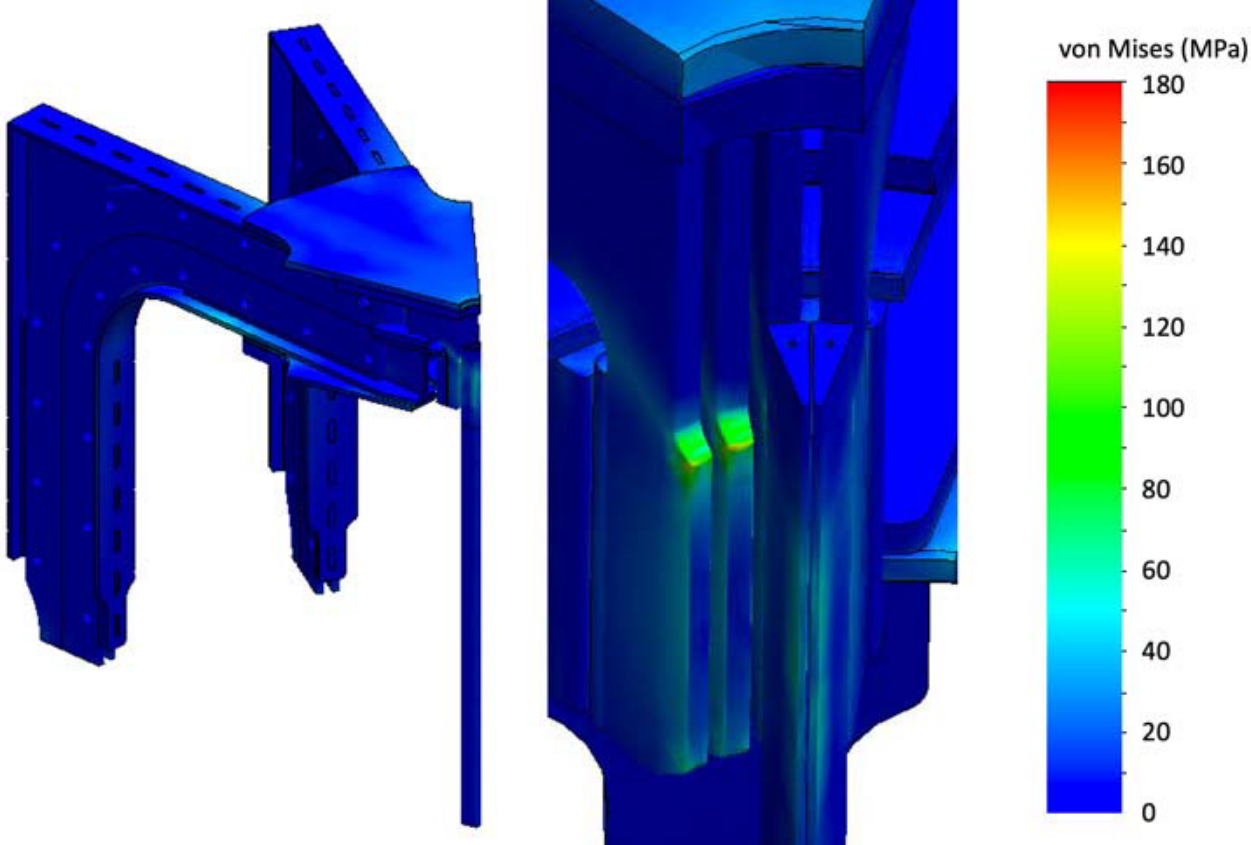
$T = 40C$


Contact interface to center bundle
Crossover region
Connection to Current Return
I_{TF}


I_{TF}
I_{TF}


Belt
Wedges
Bolts to compress wedges




von Mises (MPa)
180
160
140
120
100
80
60
40
20
0