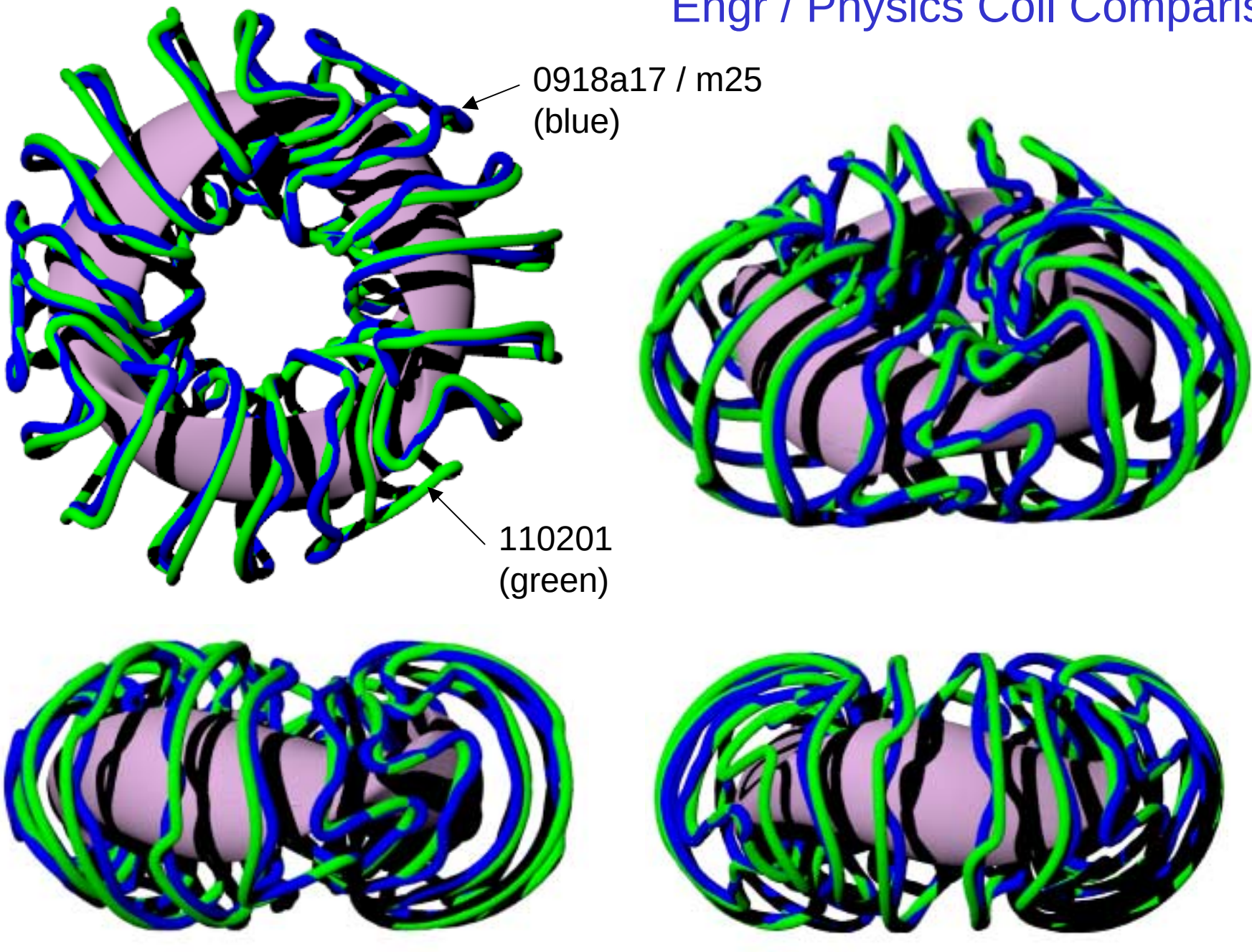
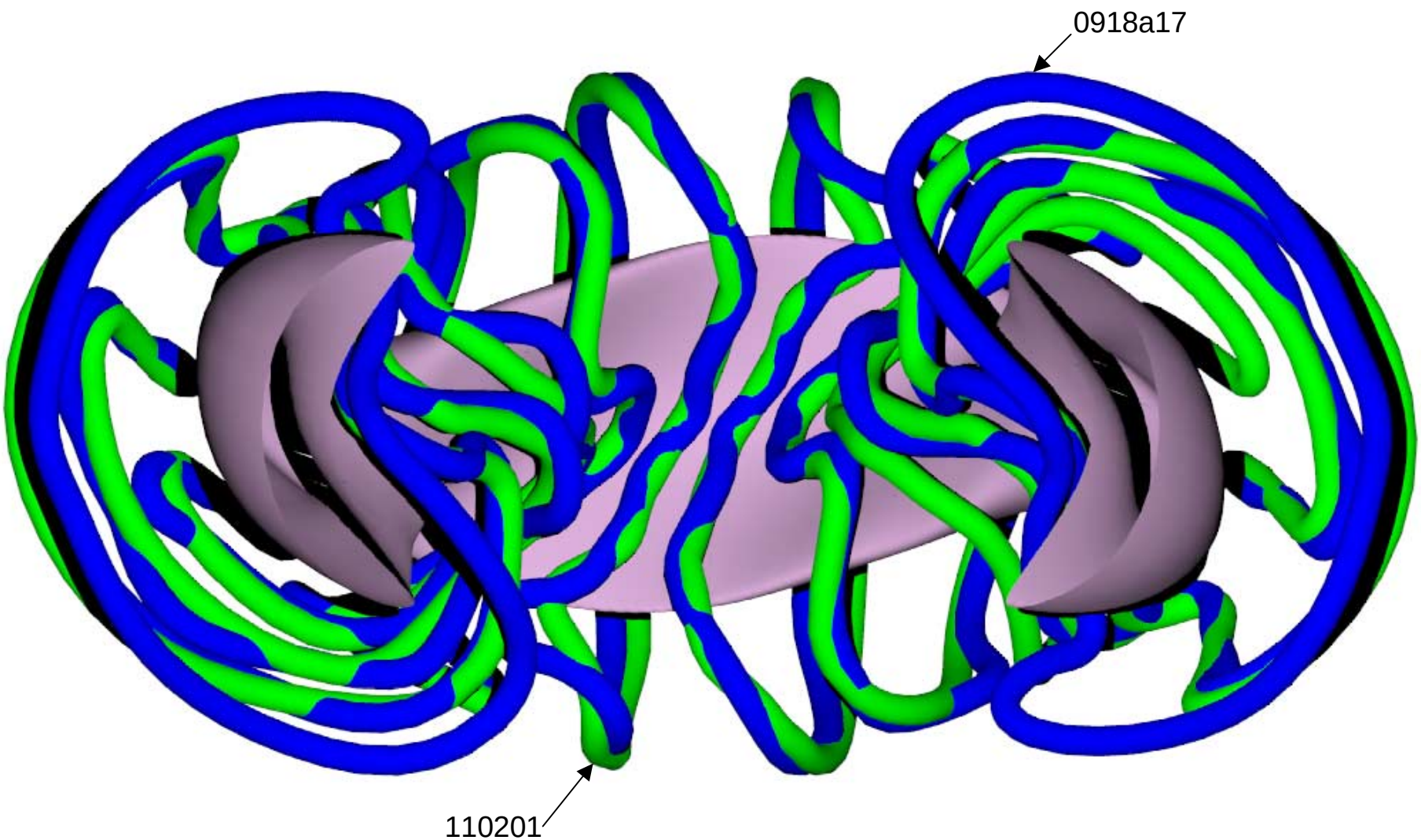
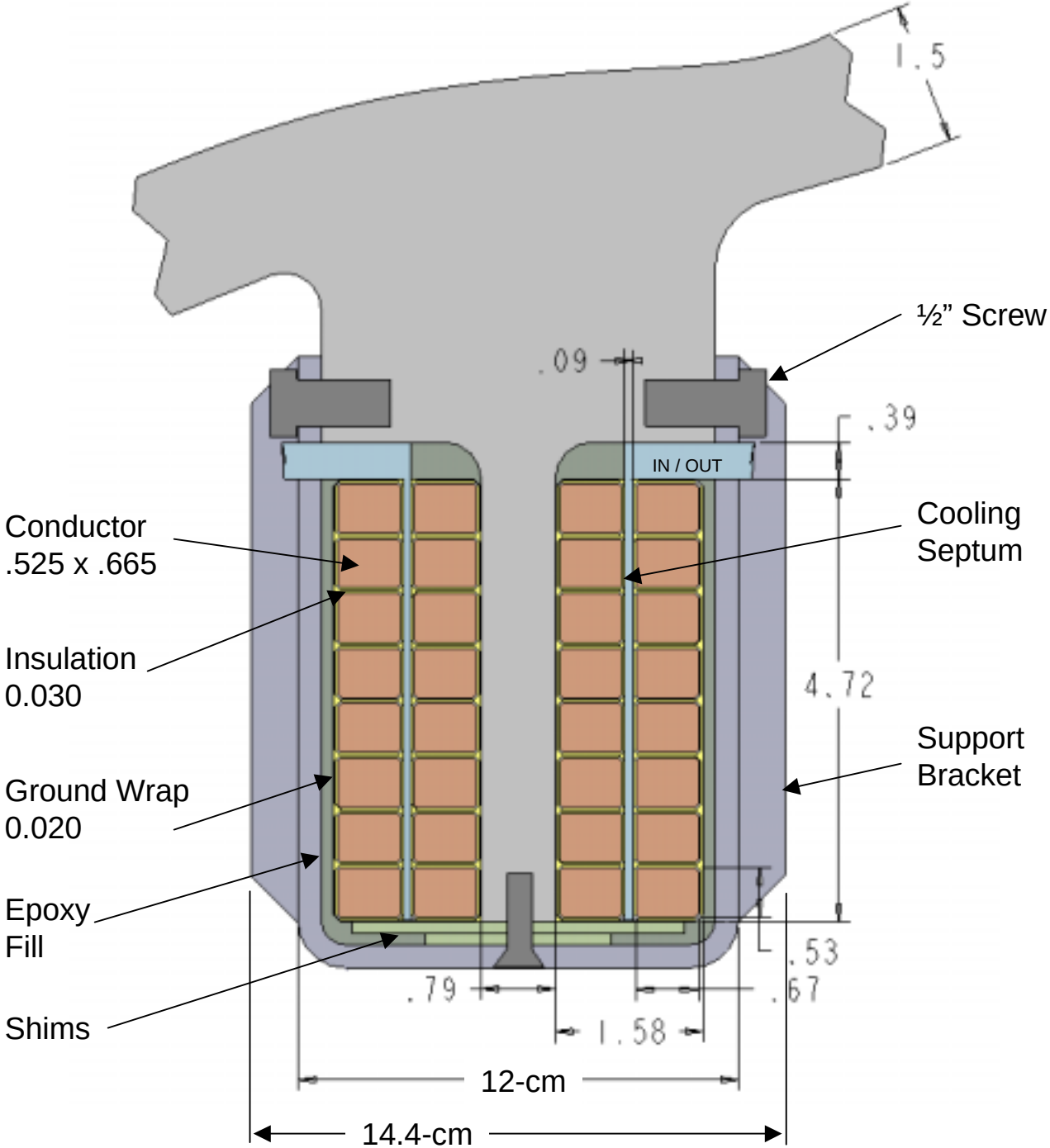
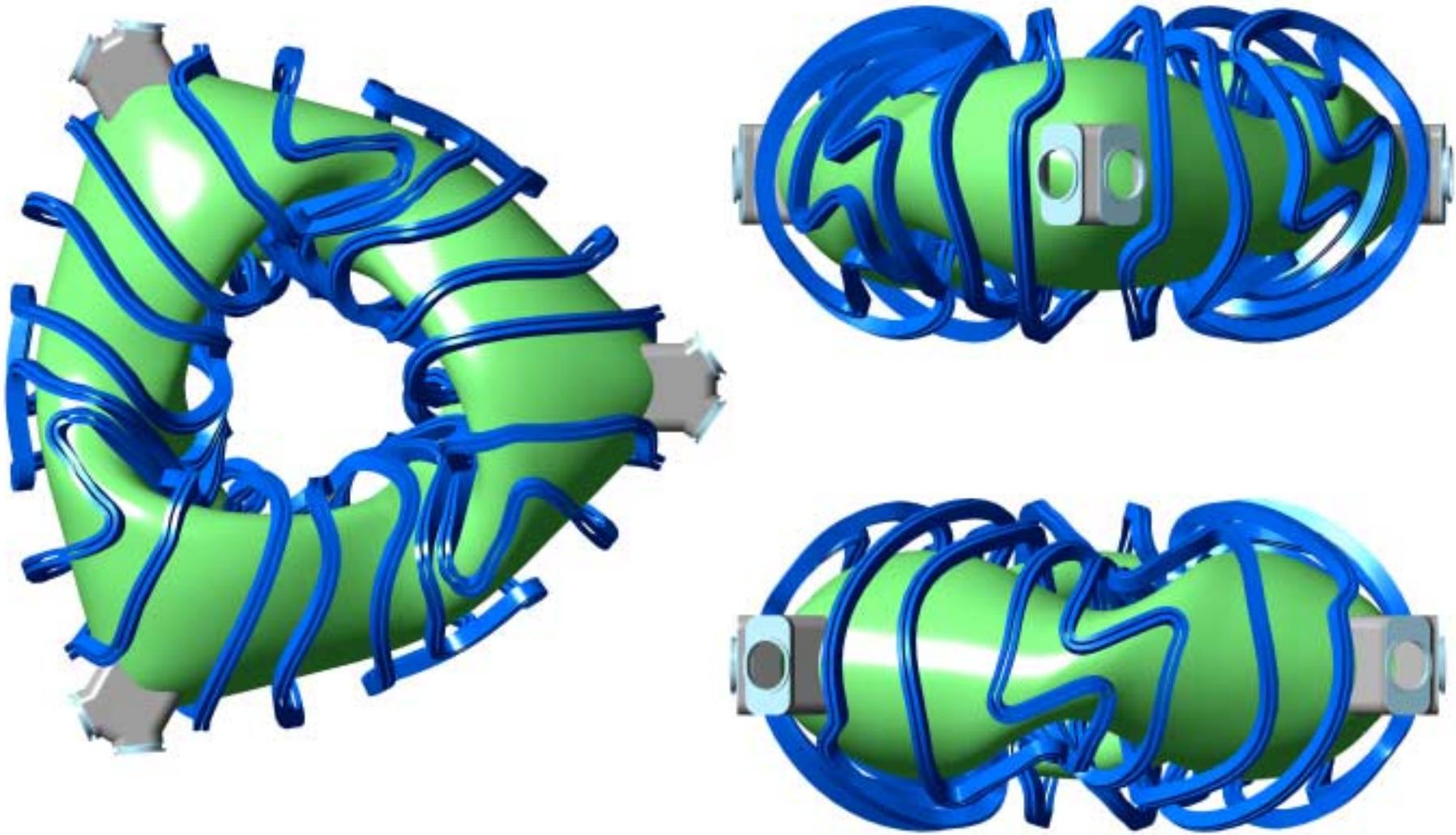
Engr / Physics Coil Comparison

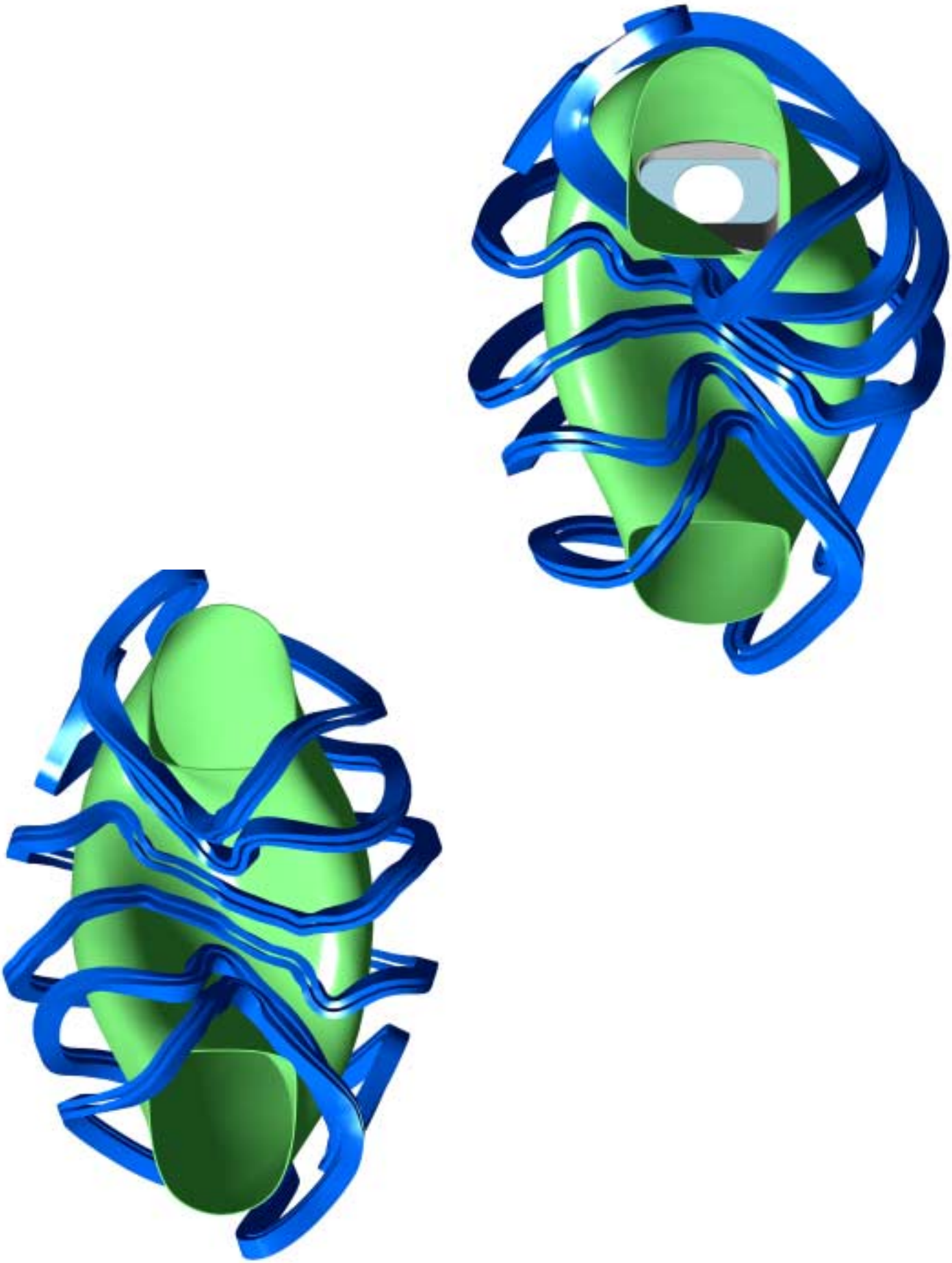


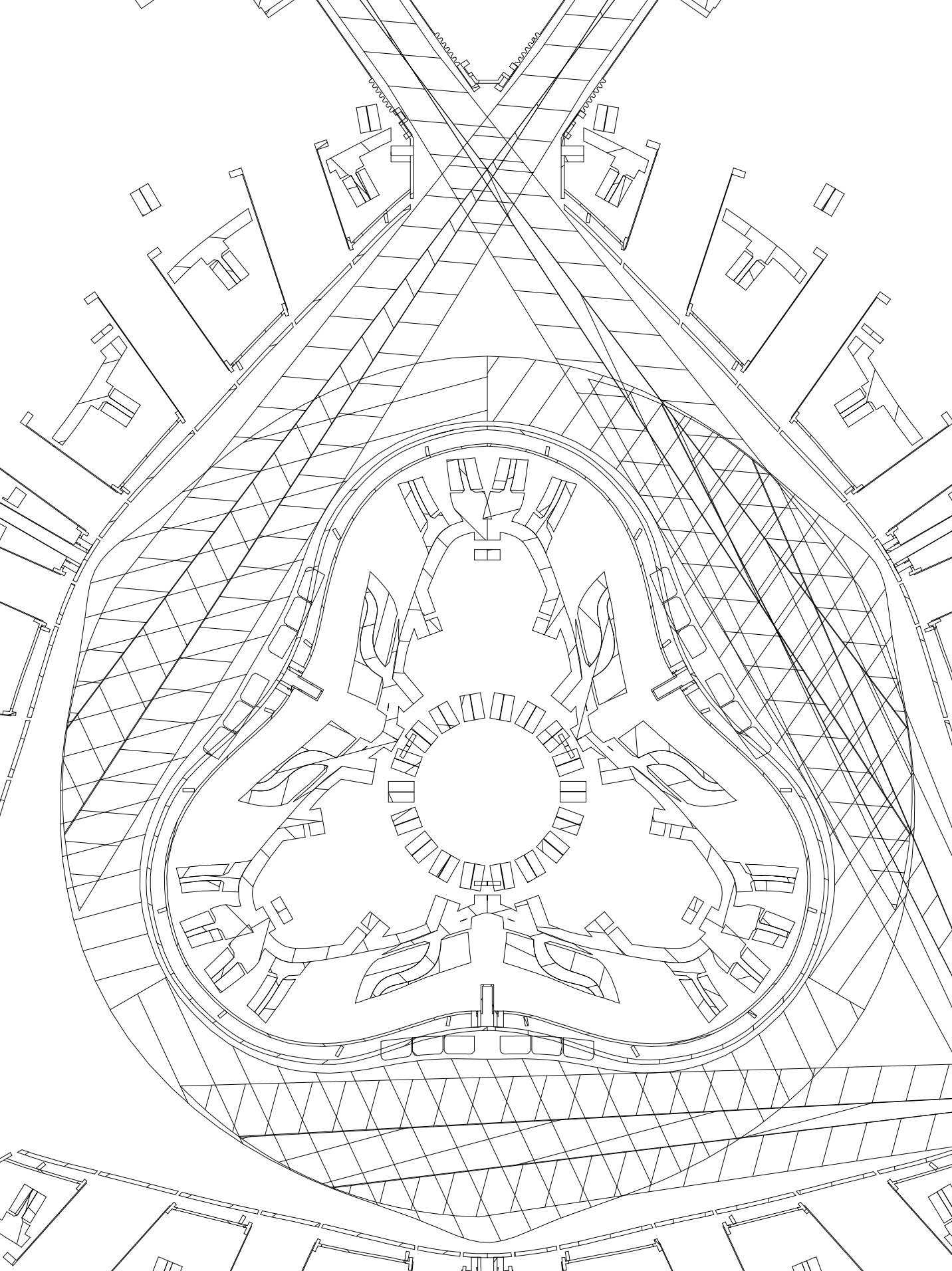

0918a17
110201


1.5
½” Screw
.09
.39
IN / OUT
Conductor
.525 x .665
Cooling
Septum
Insulation
0.030
4.72
Support
Bracket
Ground Wrap
0.020
Epoxy
Fill
.53
.79
.67
Shims
1.58
12-cm
14.4-cm

Case 110201

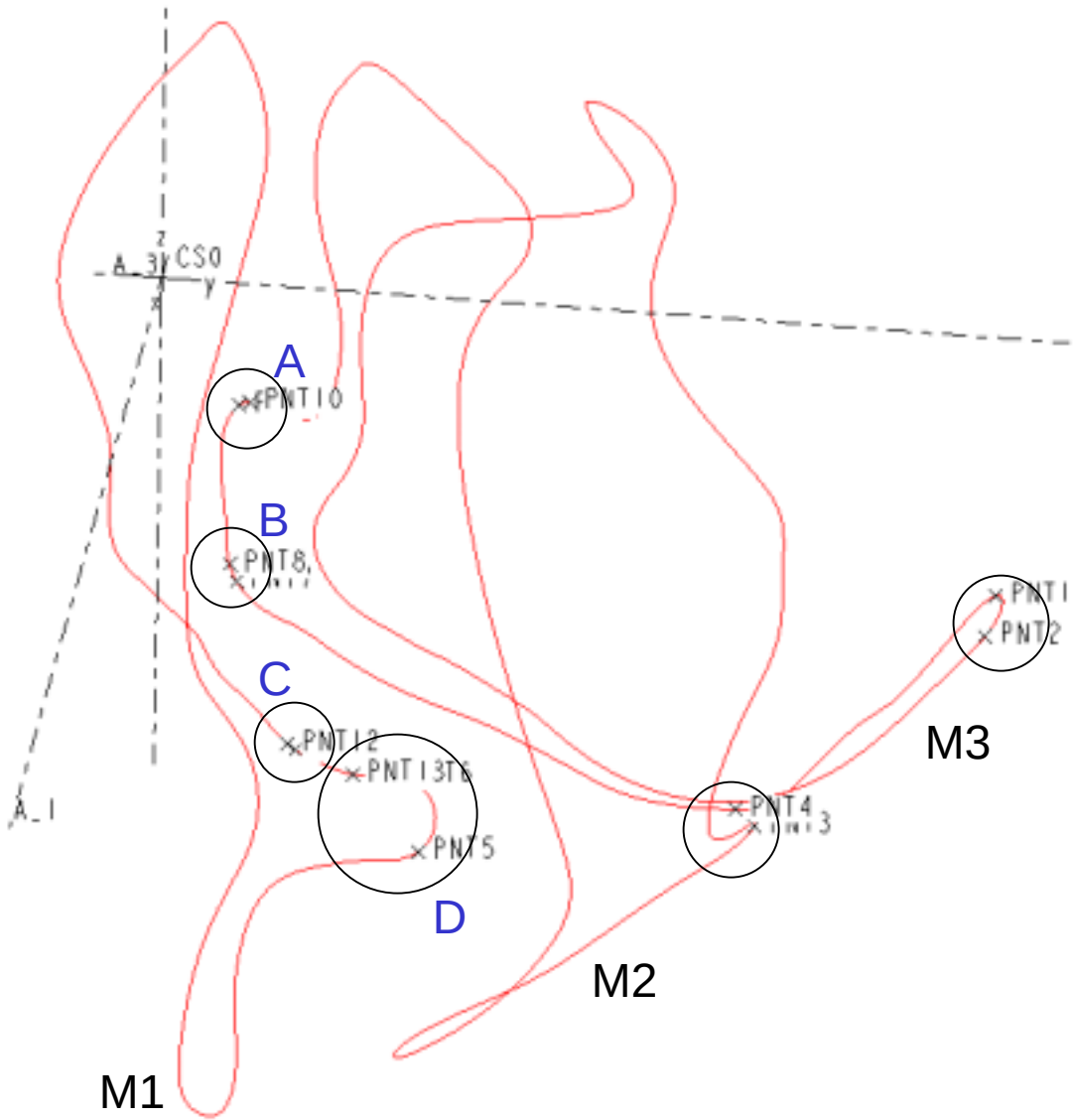






Coil Position	Type	Length (m)	Min Rad (cm)	C-C Dist (cm)	C-V Dist (cm)	C-P Dist (cm)	Current (kA)	Avg Error (%)	Max Error (%)
Case 0918a17 (m25)								0.6	2.5
18	M1								
				12.4					
01	M1	7.2	9.6		0.5	20.2	625.0		
				12.0					
02	M2	7.2	9.4		5.8	19.4	595.0		
				12.0					
03	M3	7.2	9.6		9.9	23.1	565.0		
				14.2					
04	M3								
Case 0918a17r2 (modified)								0.9	8.1
18	M1								
				16.3					
01	M1	7.3	11.8		9.8	20.0	-		
				15.9					
02	M2	7.1	10.2		9.7	19.9	-		
				14.6					
03	M3	7.1	10.0		9.6	21.4	-		
				14.9					
04	M3								
Case 1018a2								0.9	3.7
18	M1								
				13.9					
01	M1	7.4	9.8		9.5	19.6	624.7		
				13.4					
02	M2	7.3	9.8		9.2	19.3	597.2		
				11.8					
03	M3	7.0	9.7		11.4	23.9	562.2		
				14.0					
04	M3								
Case 110201								1.3	4.9
18	M1								
				15.9					
01	M1	7.0	9.8		9.8	19.9	575.8		
				15.8					
02	M2	7.1	9.9		8.6	19.2	675.8		
				15.6					
03	M3	6.3	9.7		11.2	23.9	528.1		
				15.6					
04	M3								
Notes:									
Dimensions at room temperature (scale factor = 1.003435)									

Regions where bend radius < 11-cm



Example of mod required to increase radius of curvature from 9 to 14-cm