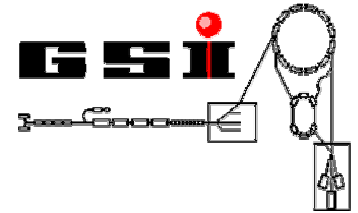


FEC Mounting Issues



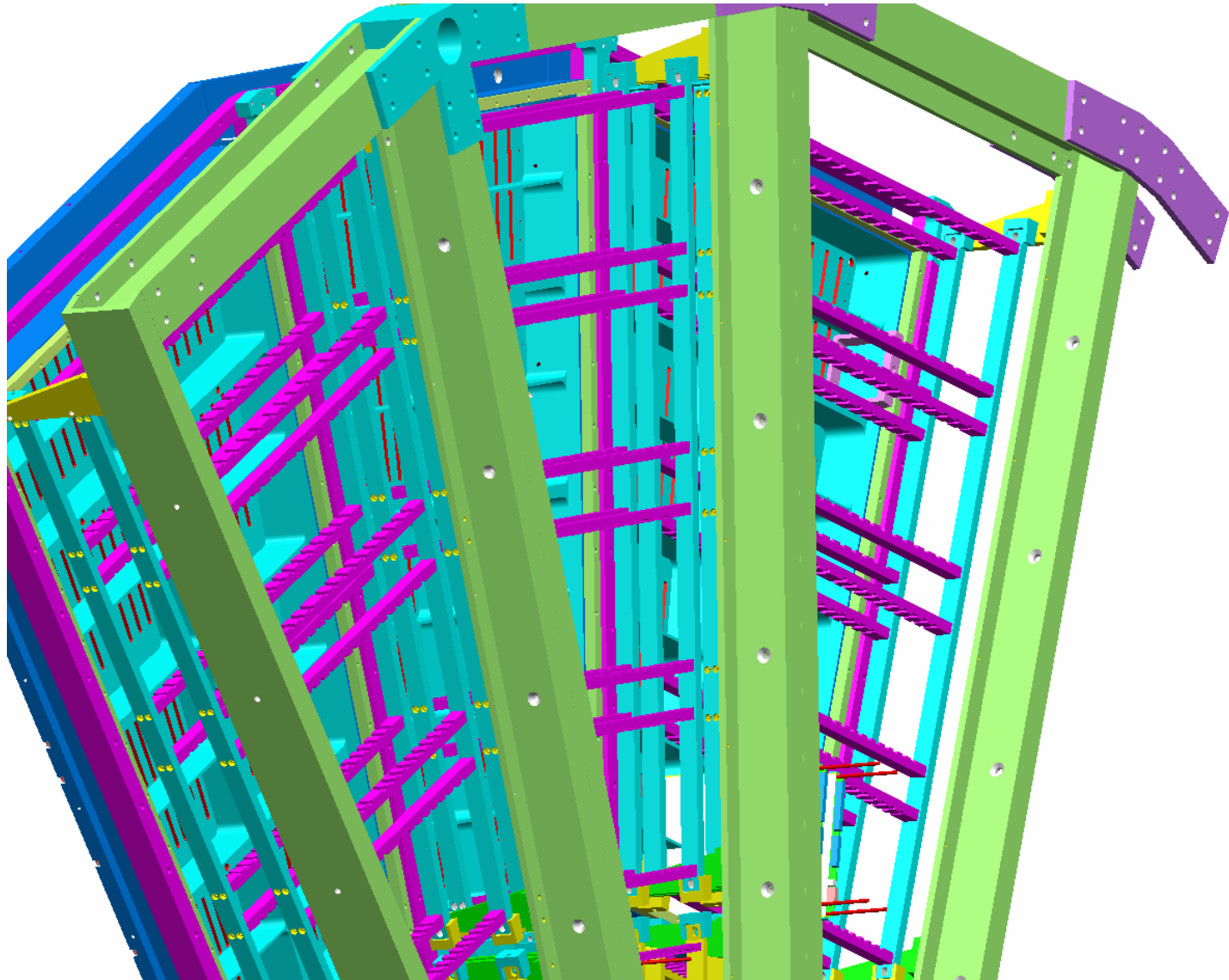
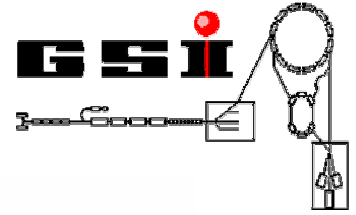
Time Table FEC Frame

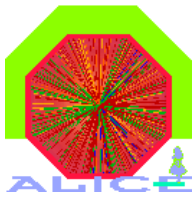


drawings for workshop ready	end Jan. 04
prototype production start (if approved by collaboration)	mid Feb. 04
production (2 frames)	mid April 04 (6-8 weeks)
testing, exercising, tool development	May 04 - Aug. 04
series production start	Sep. 04

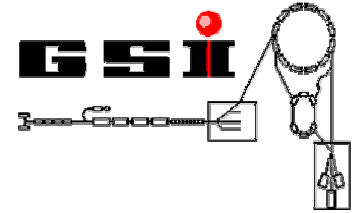


FEC Mounting Frame



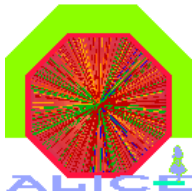


FEM SSW

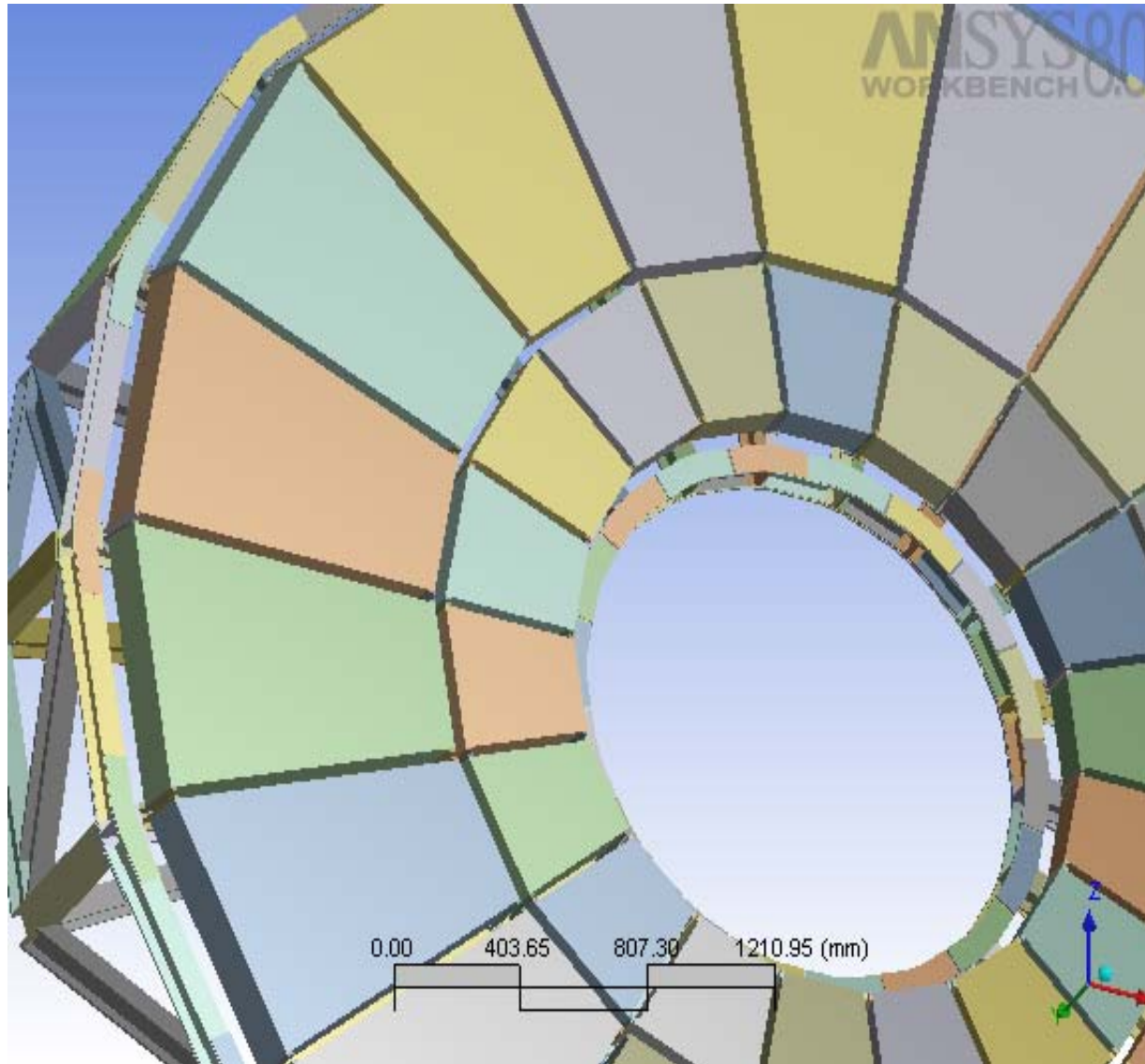


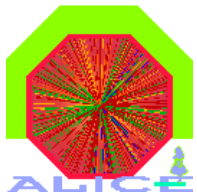
	FEC [kg]	copper plate [kg]	misc [kg]	Σ
inner sector	18	3.3	6.2	27.5
outer sector	32	6.6	18.9	57.5
Σ	50	10	25	85 kg

ITS torque: 500 kg x 1.1 m

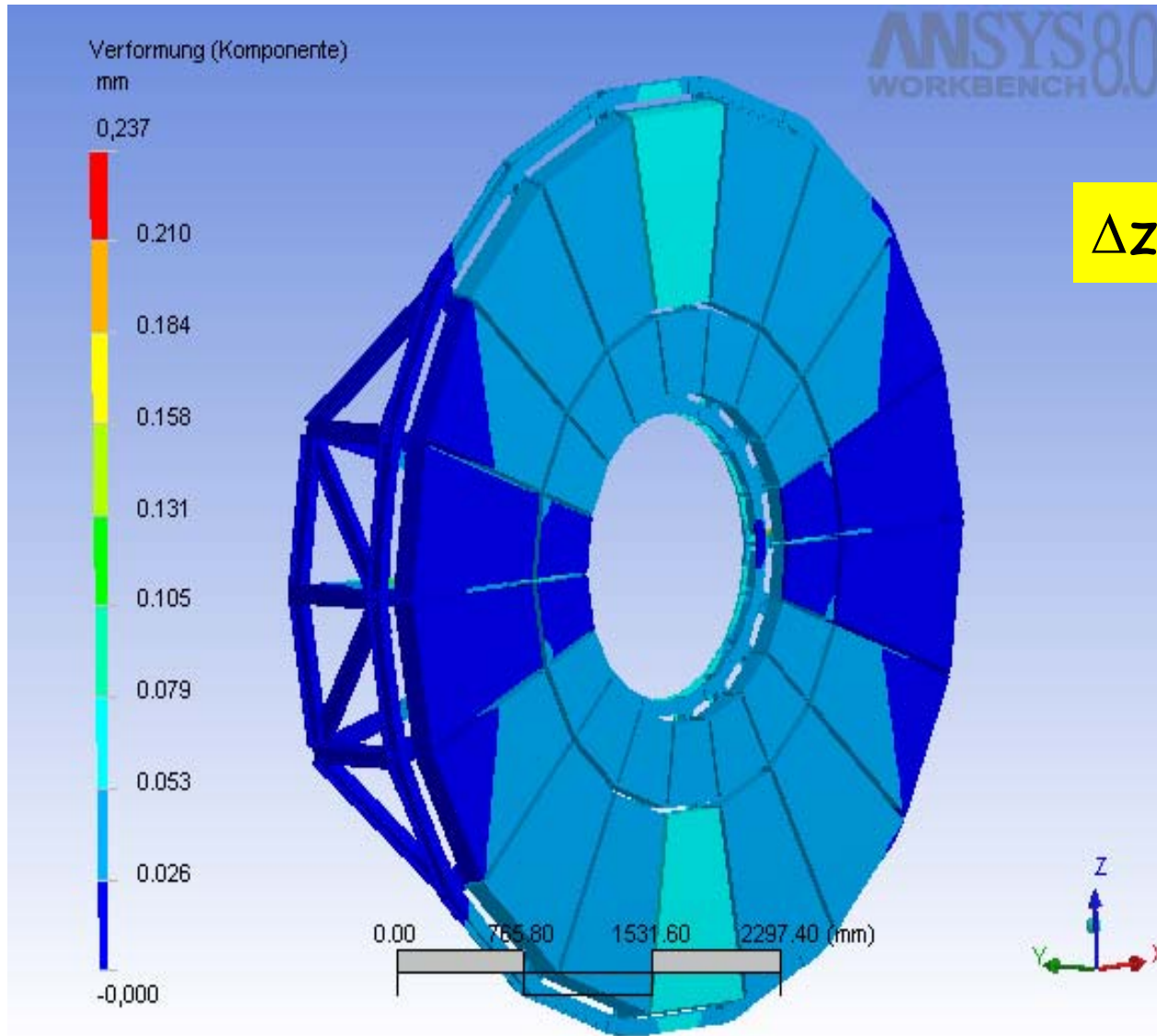
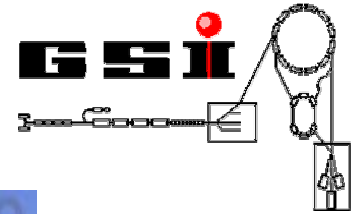


FEM Layout

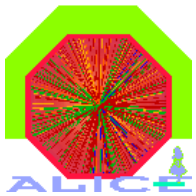




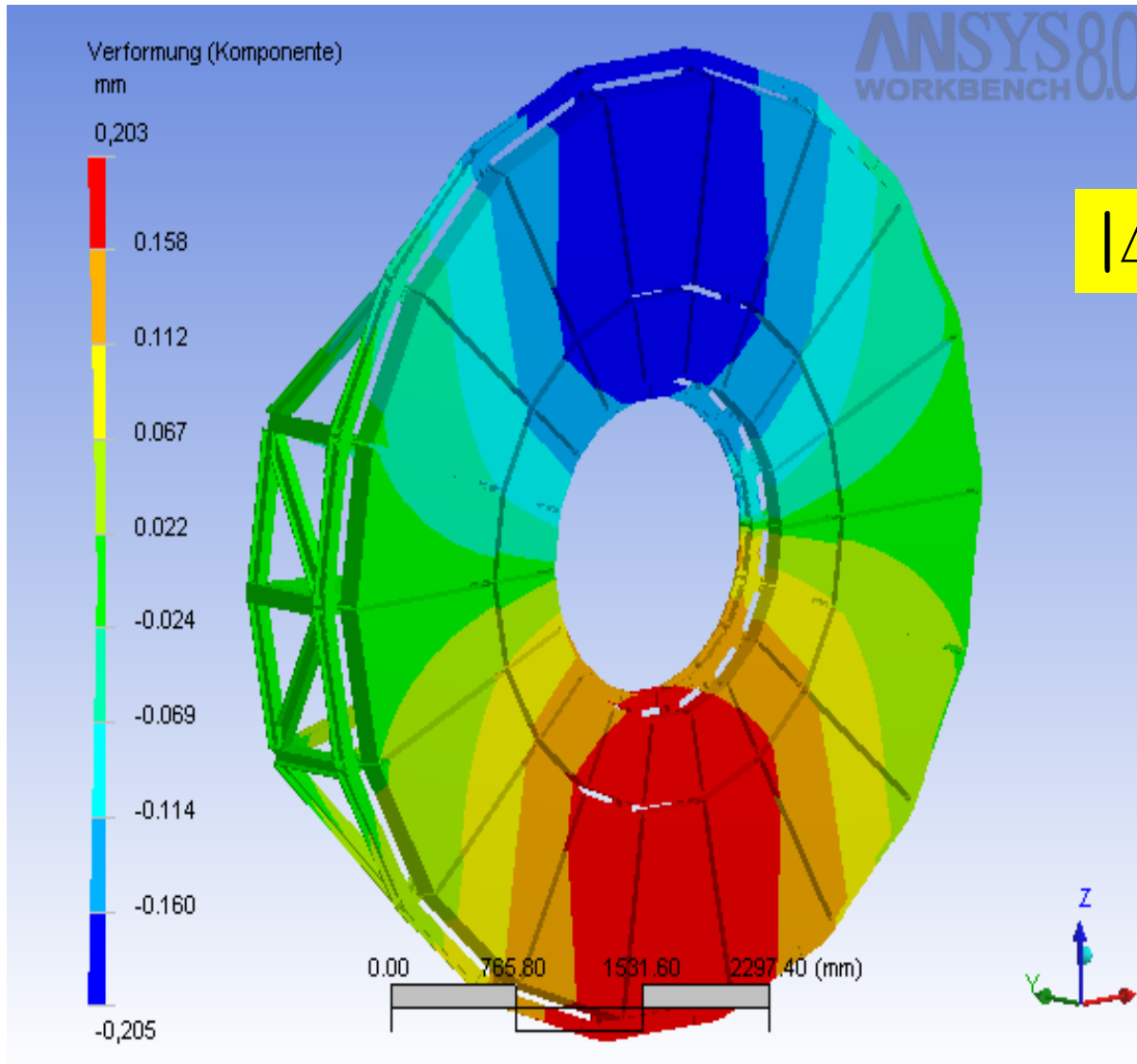
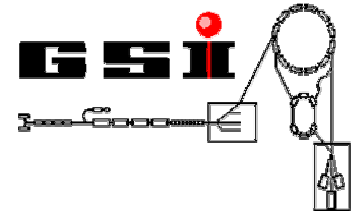
Deformation in Z (Vertical)

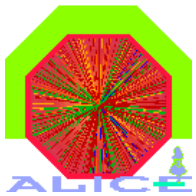


$\Delta z < 0.08 \text{ mm}$

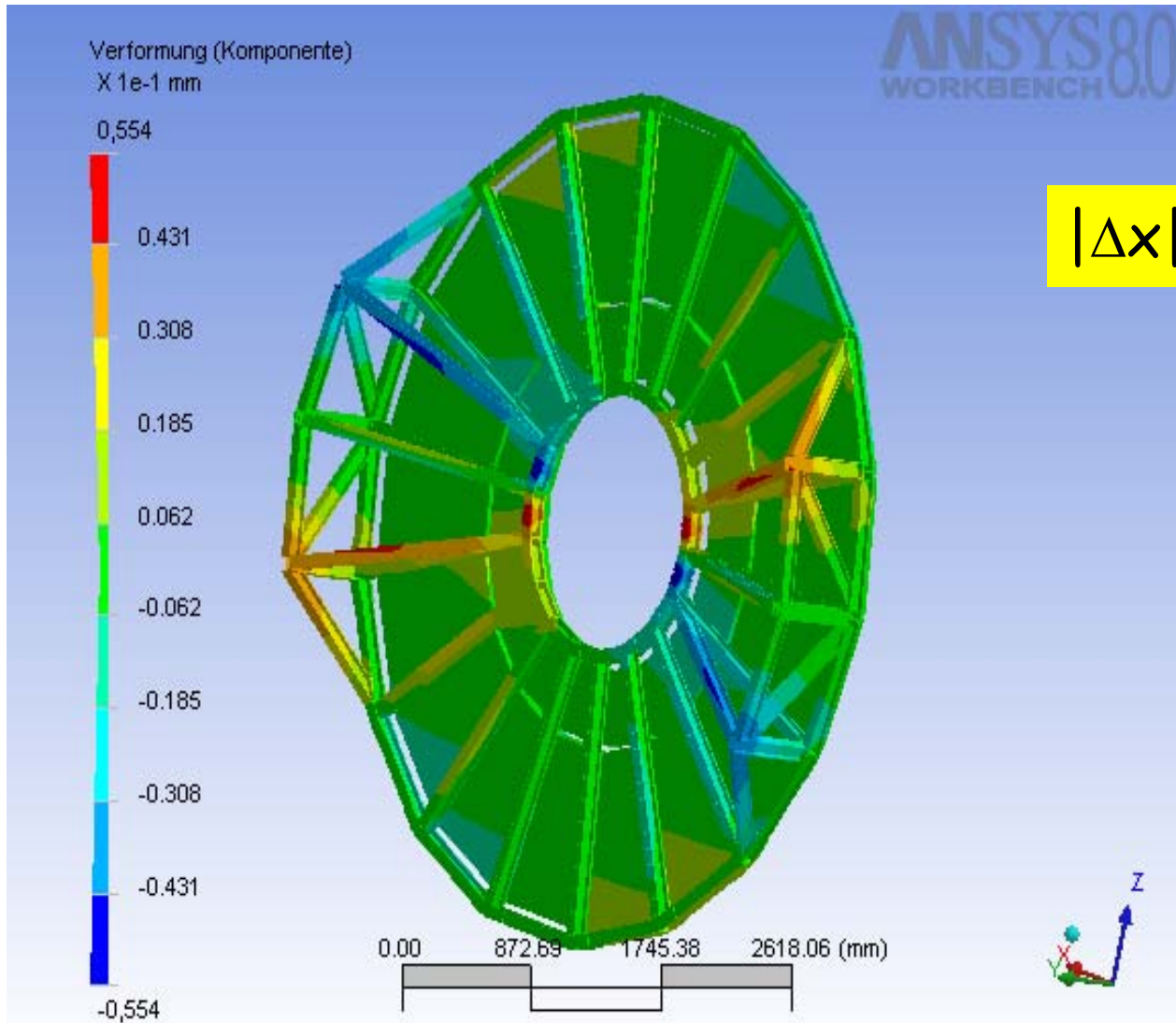
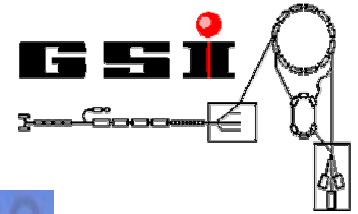


Deformation Y (Beam Direction)

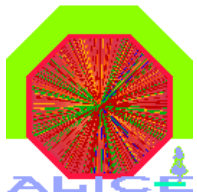




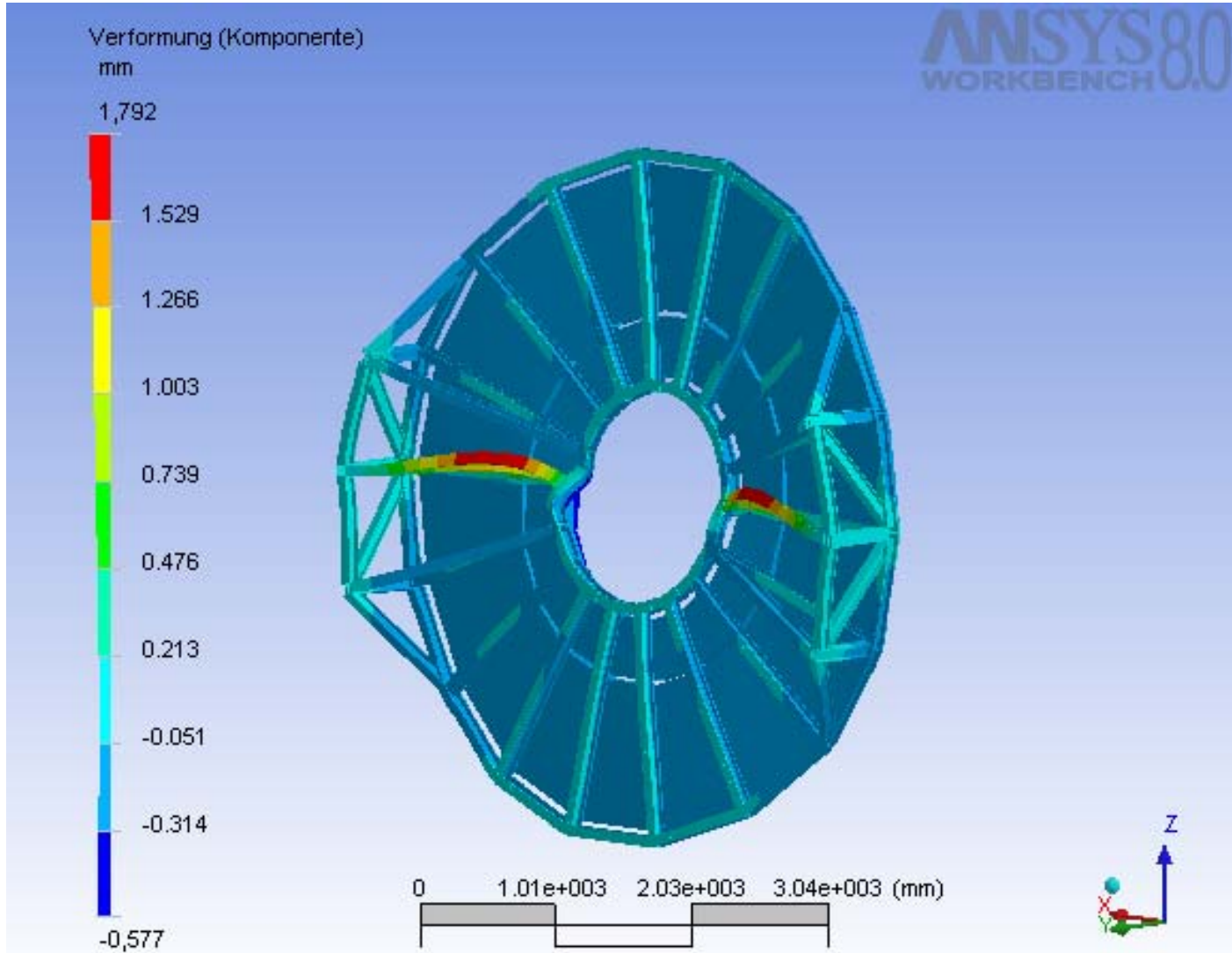
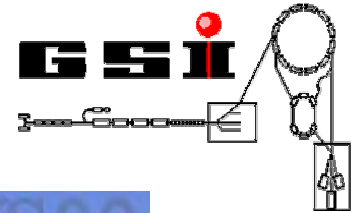
Deformation X (Horizontal)

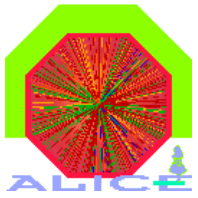


$|\Delta x| < 0.06 \text{ mm}$

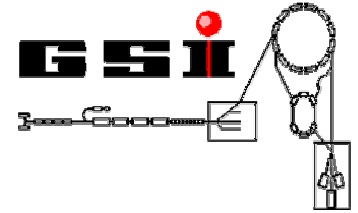


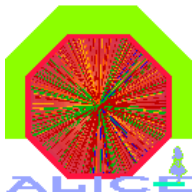
Worst Case Scenario - 5t ITS



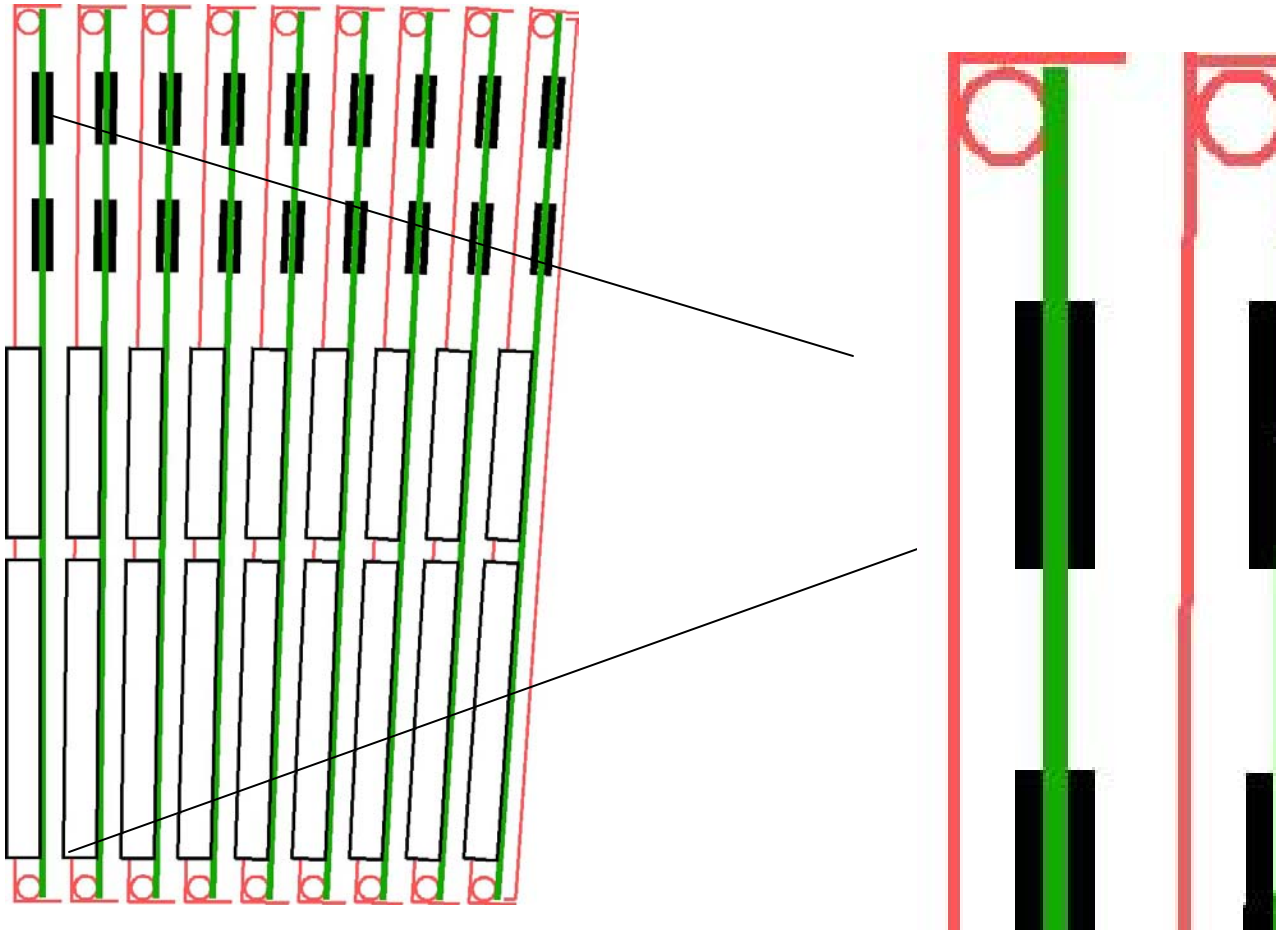
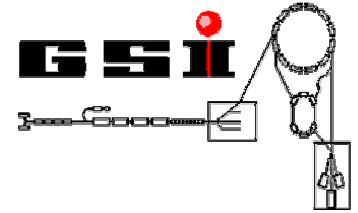


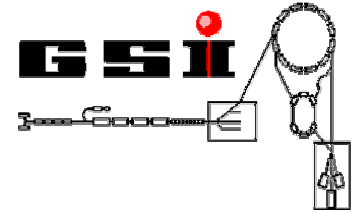
FEC Cards





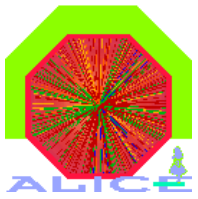
FEC Rev 3.2 - Space Problem IROC



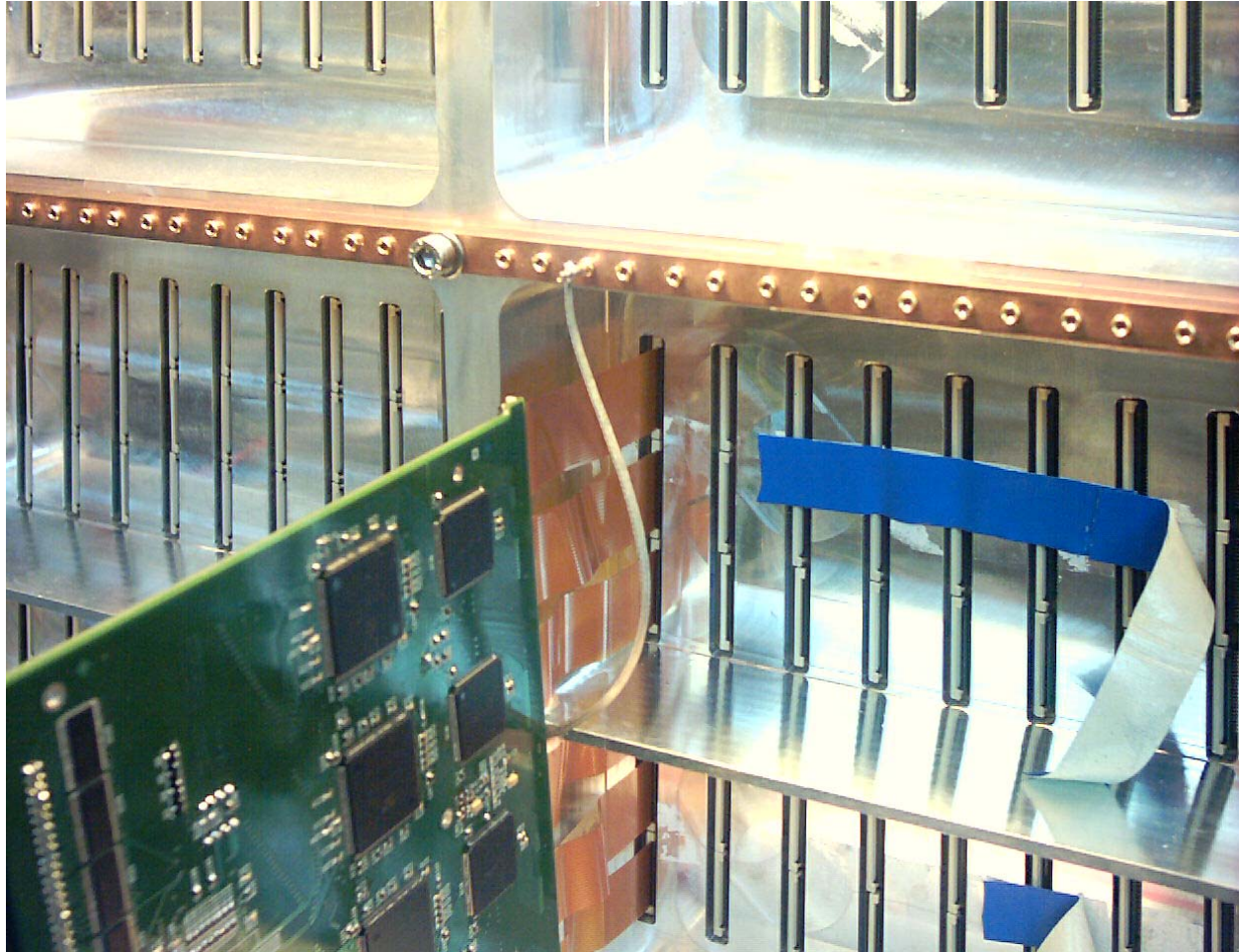
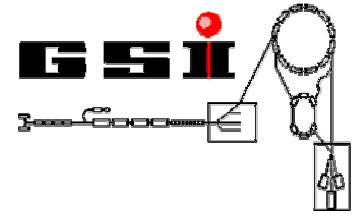


Noise

OROC + FEC 3.2

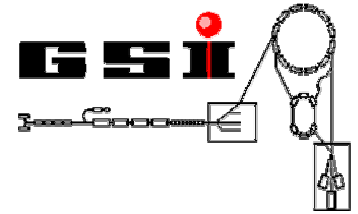


FEC + ground bar

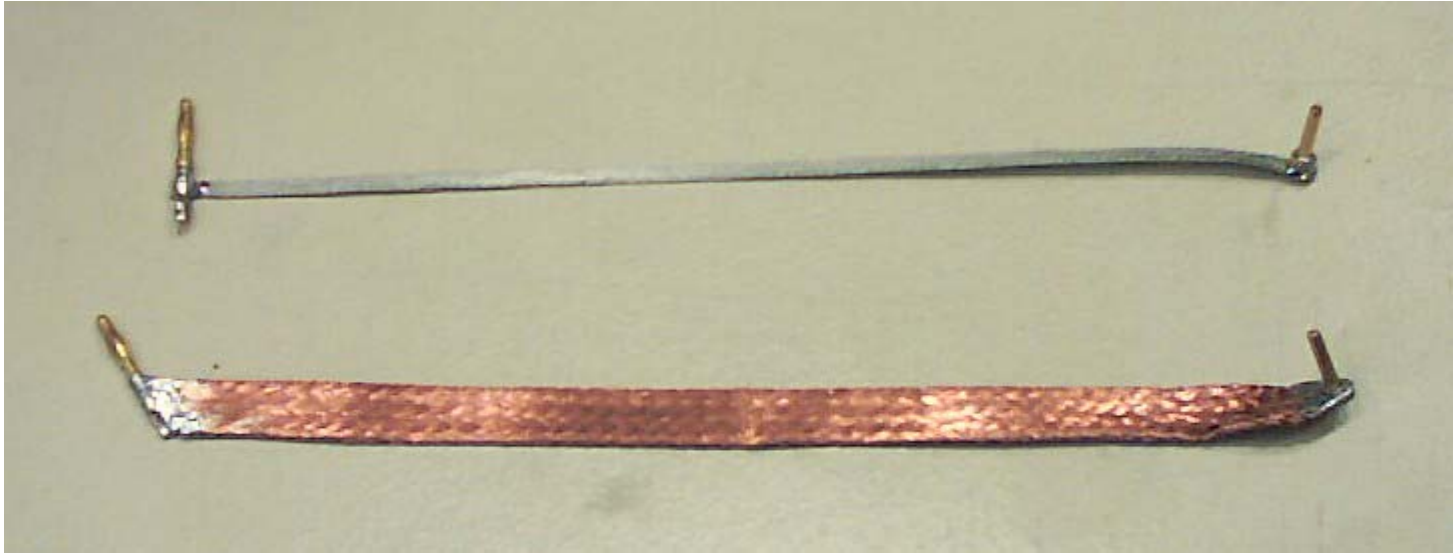




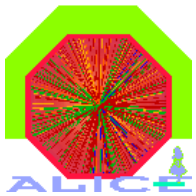
Ground cable



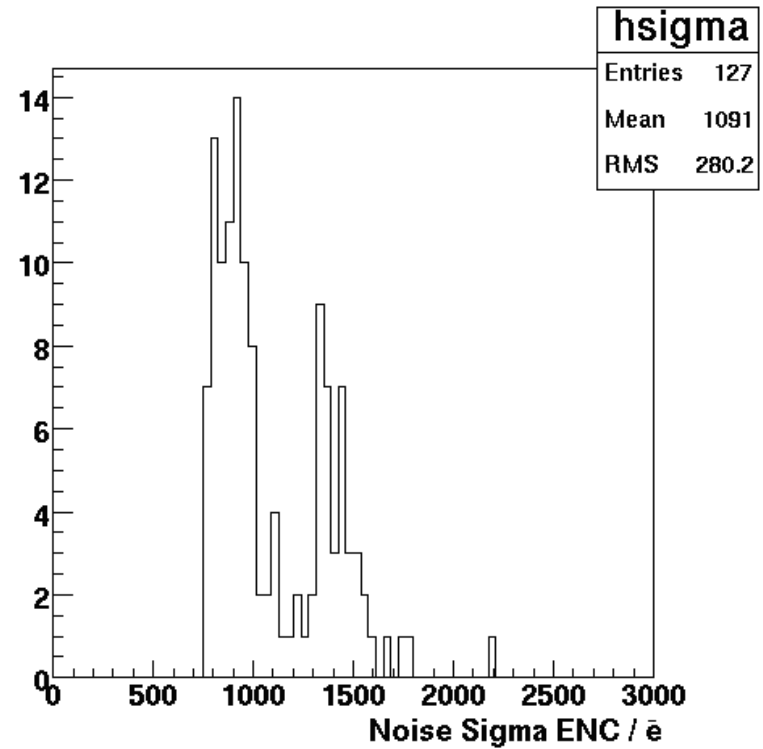
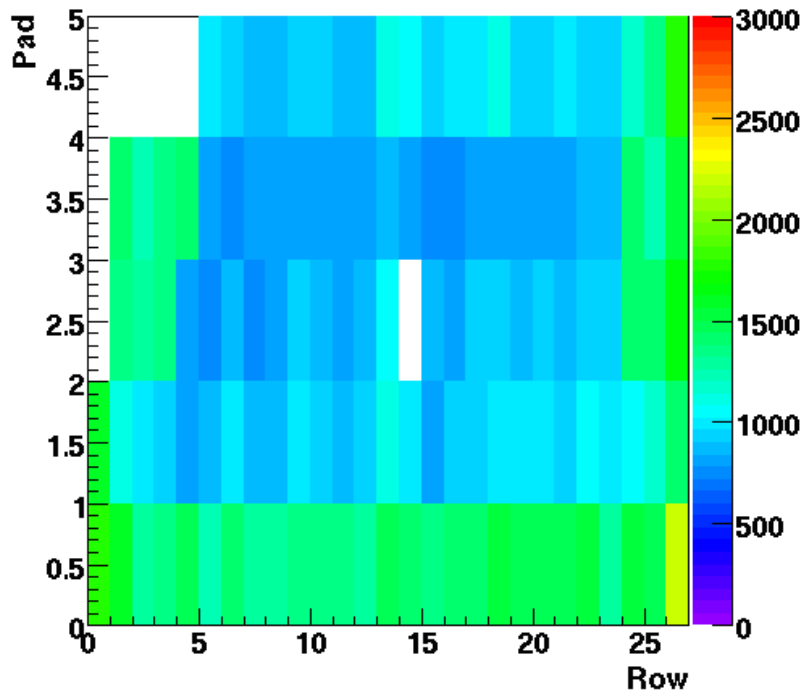
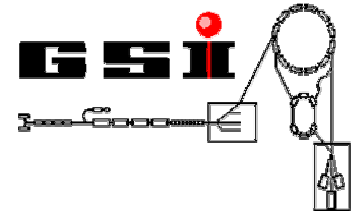
thin



bulky

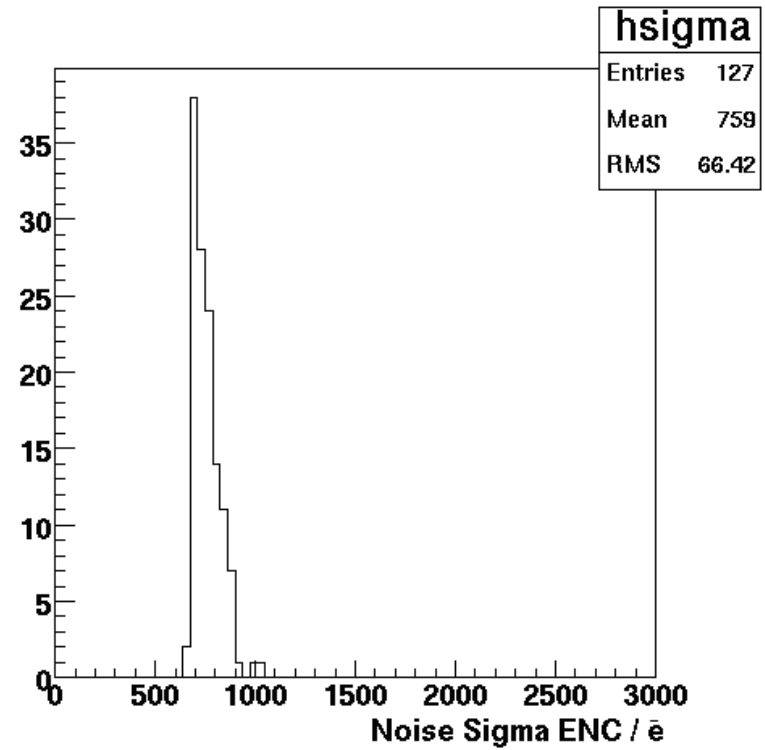
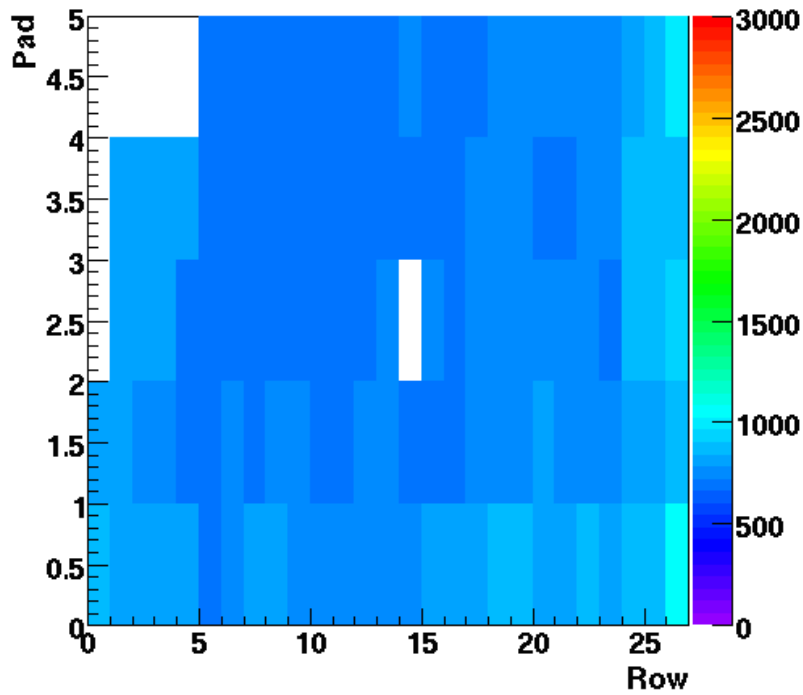
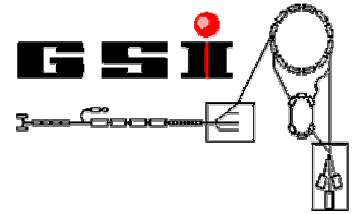


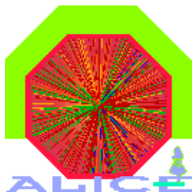
w/o extra grounding





bulky ground cable





thin ground cable

