Electromagnetic Fields Affected by Vibration and Deformation

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deformation
vibration
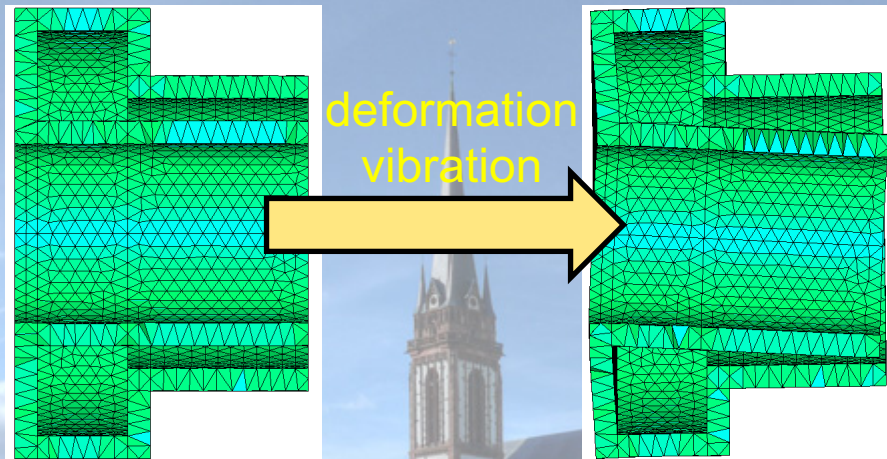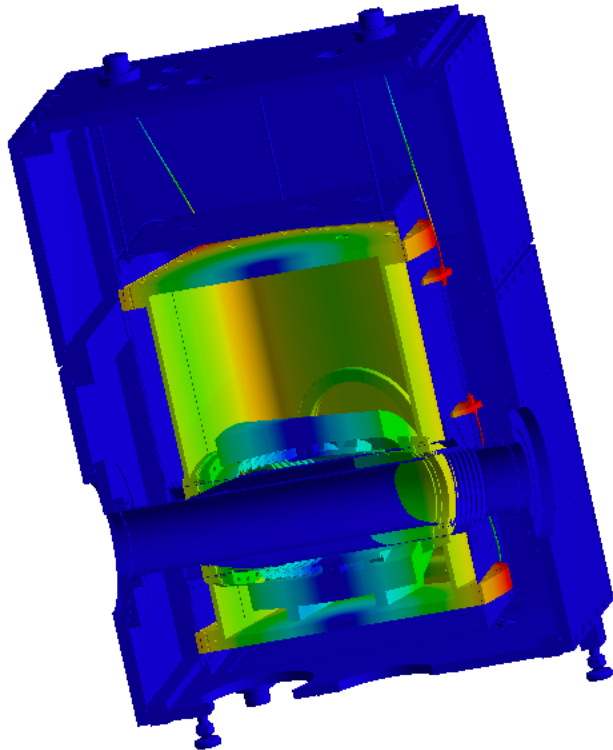
Simulation toolchain
(based on Gmsh + own tools):

- mechanical eigenmodes
- external sources
- Lorentz forces

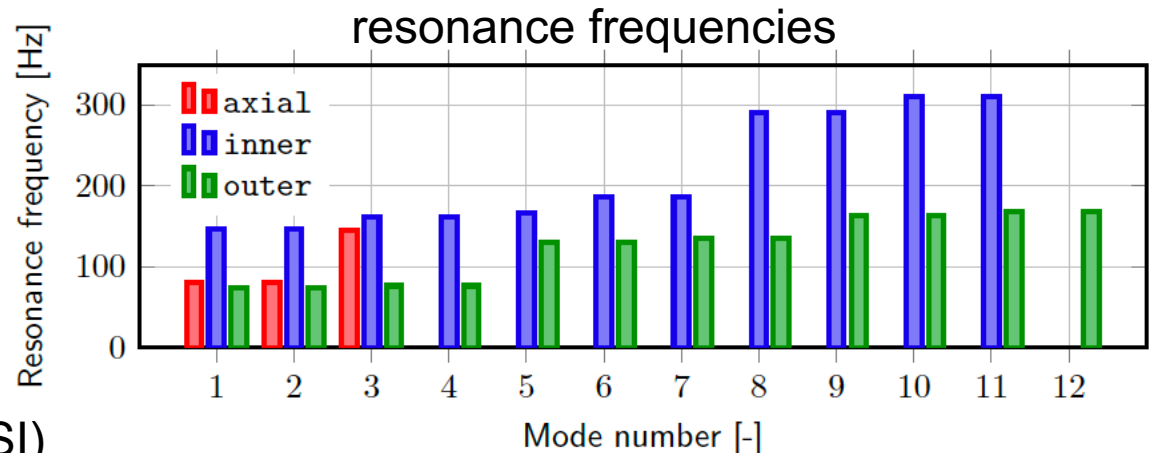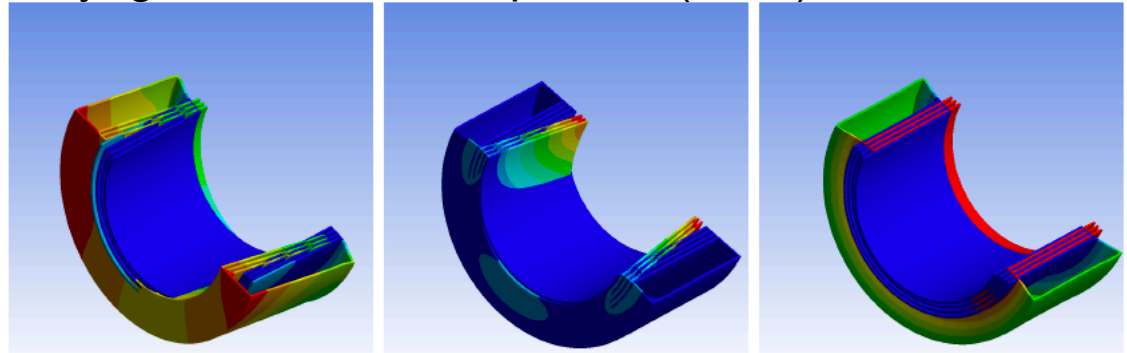- mesh morphing
  + curved elements

- electromagnetic fields
- inductances, voltages, ...

Cryogenic current comparator (CCC)

cryostat

cryogenic current comparator (CCC) -- deformation

resonance frequencies

+ D. Haider, T. Sieber et al. (GSI)
+ J. Golm, V. Tympel, T. Stoehlker et al. (Jena)