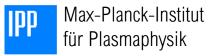
Advanced Structural Analysis of W7-X Magnet System Weight Supports IIII

V. Bykov , K. Egorov, J. Fellinger, F. Schauer, M. Köppen

(FIP/P8-17)

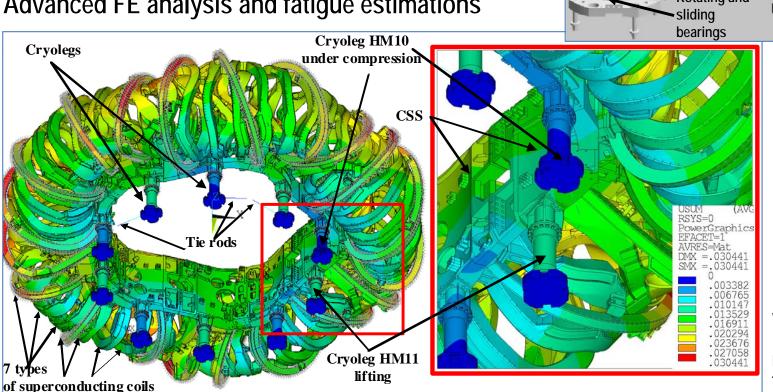


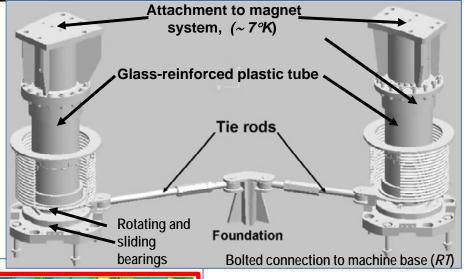
Sliding supports for large superconducting magnet system (cryo-legs)

Advanced modular stellarator Wendelstein 7-X

Asymmetric loading due to trim coils (error field correction [1]) and vertical position of cryo-legs

Advanced FE analysis and fatigue estimations





Load cases for cryo-legs

Half	Direction	Force,
module		kN
HMx0:	Compressive	1200
	Horizontal	194
HMx1	Compressive	~ 10
	Horizontal	62

[1] see also FIP/P8-19

Final Assessment of Wendelstein 7-X Magnetic Field **Perturbations Caused** by Construction Asymmetries

T. Andreeva

Number of trim coil cycles needs to be considered, counted and assessed before and during W7-X operation using the results of cryo-leg behavior monitoring

13-18 October 2014 FEC 2014, St. Petersburg, Russia