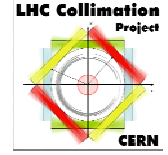




The LHC Collimation project



LHC Collimators for Phase 1

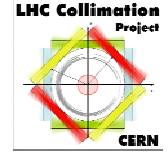
**Jaw maximum deflection in
Transient Conditions ($10s\ 4e11\ p/s$)**

Alessandro Bertarelli
Alessandro Dallocchio



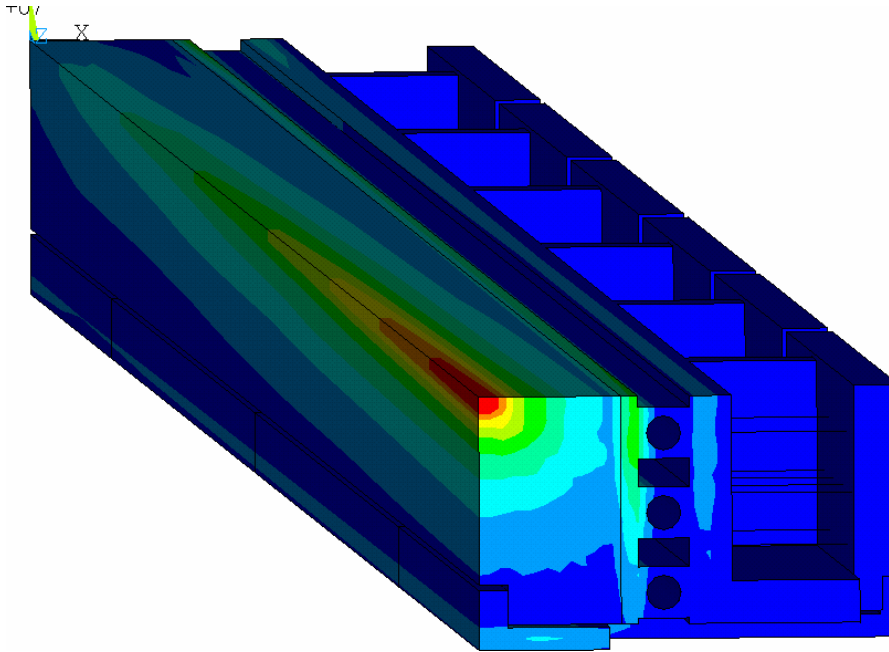


Thermo-mechanical Analysis

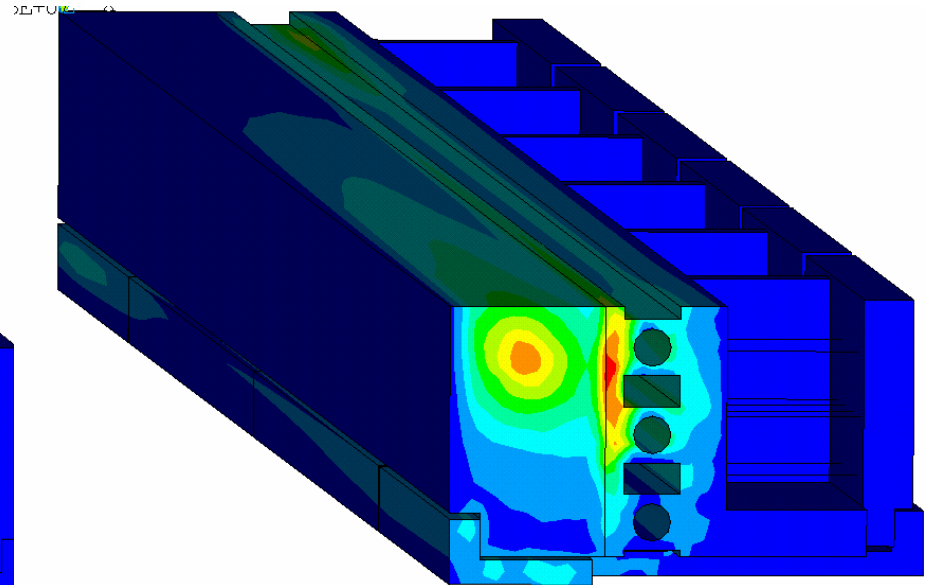


Transient conditions: $4e11p/s$ 7TeV during 10s
Maximum deflection measured at jaw mid-span

Symmetric Power Density Distribution

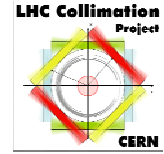


Unsymmetric Power Density Distribution

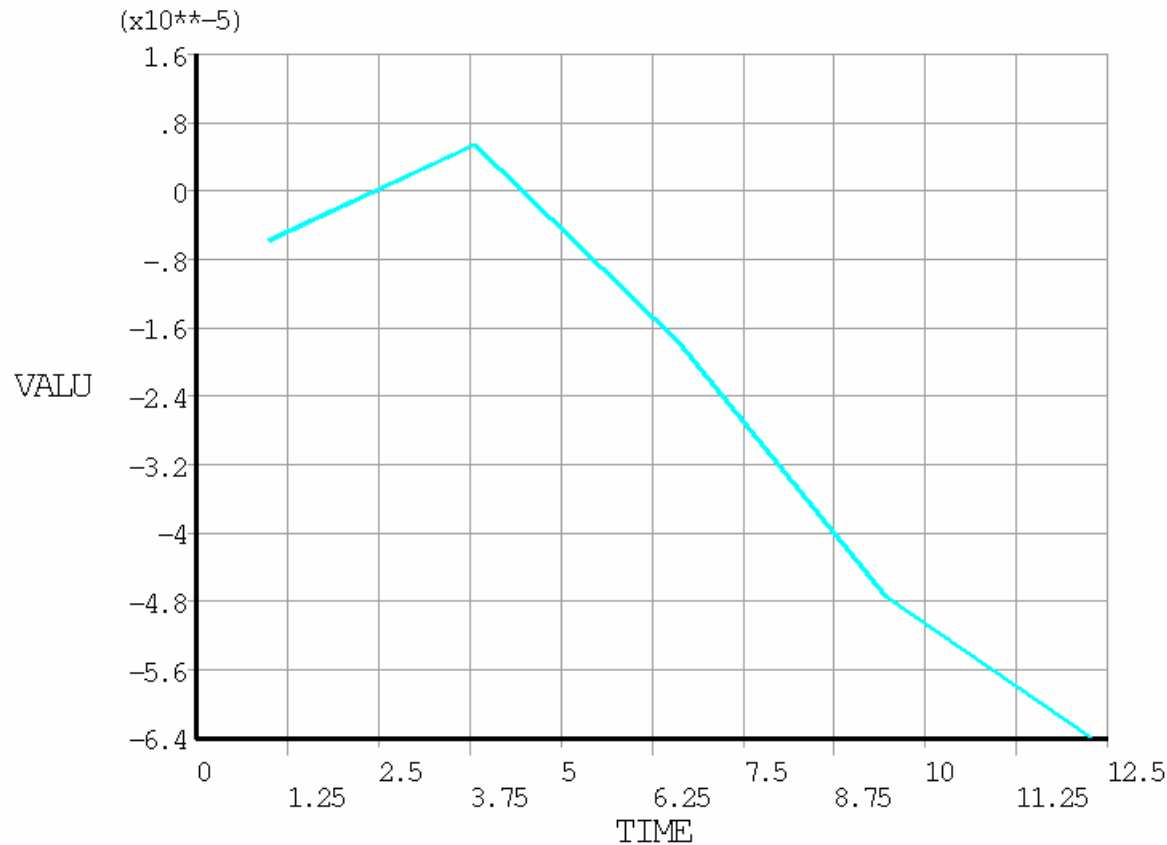




Thermo-mechanical Analysis

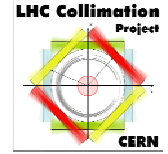


R4550 Graphite: Symmetric Power distribution

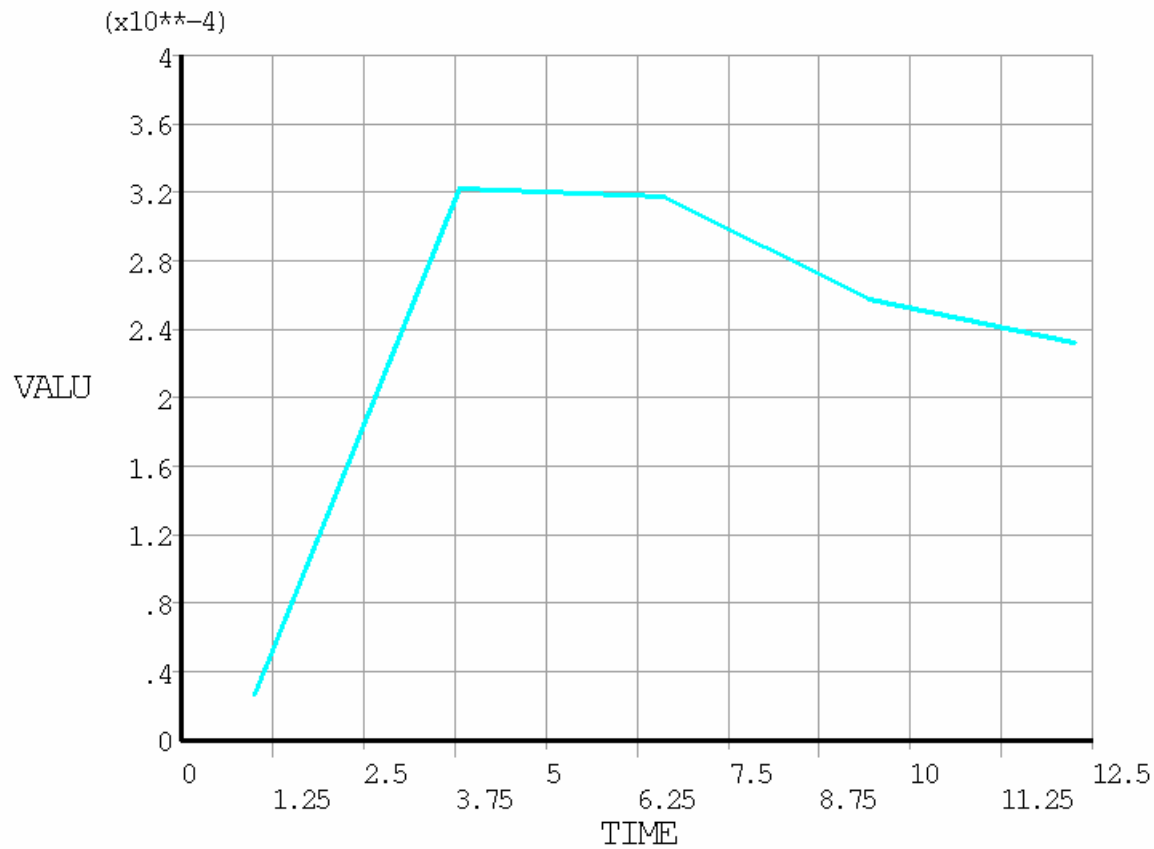




Thermo-mechanical Analysis

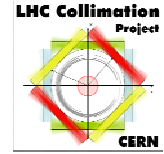


AC150K 2D-C/C: Symmetric Power distribution

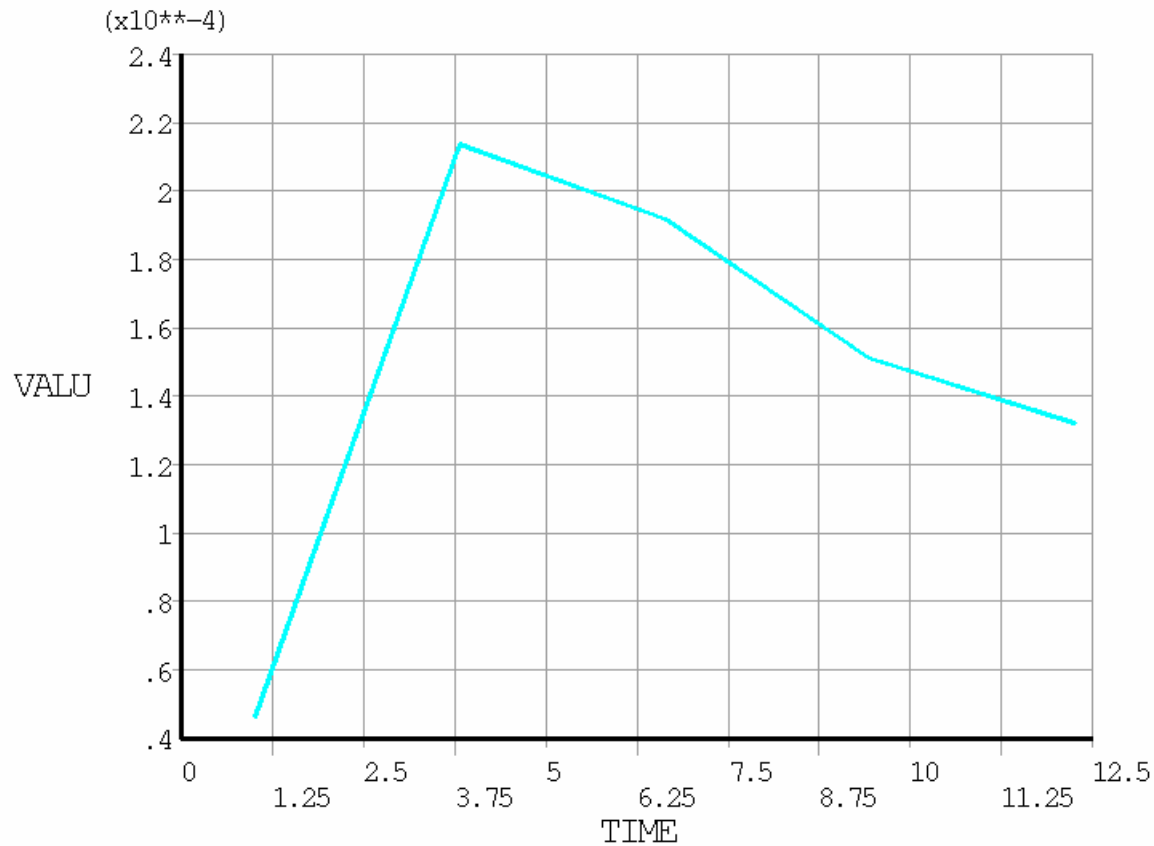




Thermo-mechanical Analysis

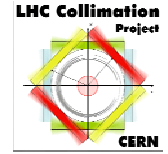


R4550 Graphite: Unsymmetric Power distribution

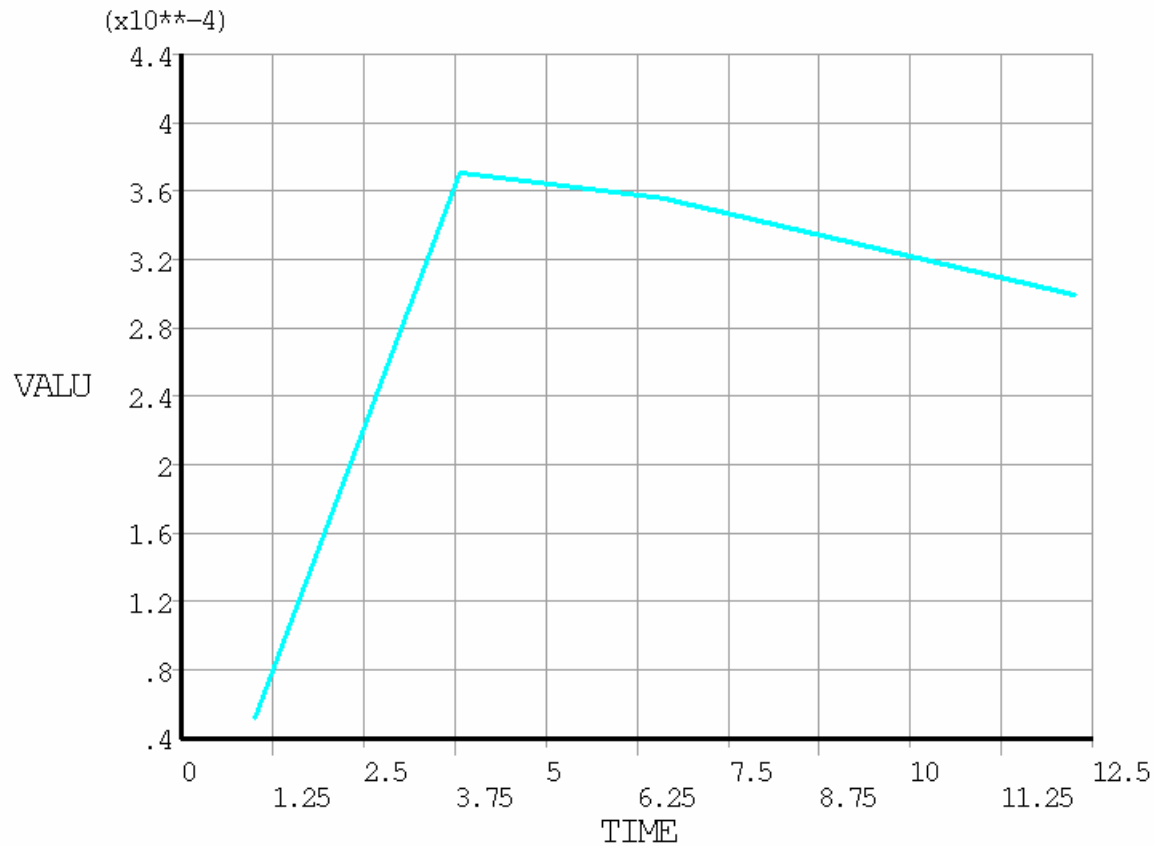




Thermo-mechanical Analysis

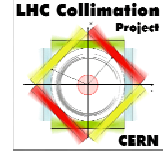


AC150K 2D-C/C: Unsymymmetric Power distribution





Thermo-mechanical Analysis



AC150K 2D-C/C CuNi pipes: Unsymmetric Power distribution

