



CMS Request



- ❑ CMS reported arithmetic problem in G4Torus – which is fixed – need official patch with this correction (8.3/9.0)
- ❑ Old request - Visualization of Boolean solids
- ❑ CMS has made an extensive study of tracking in B-field
 - Number of steps by electrons/positrons are maximum in all volumes and these step size is typically short
 - G4ClassicalRK4 is most optimum for small steps and G4HelixXXEuler is most optimum for large steps
 - Performance is not too sensitive to settings of precision parameters
 - Caching magnetic field helps but is already kept at some optimum setting in CMS application
 - Needs a hybrid stepper using field values and field gradients
- ❑ CMS could not make validation of G4.9 – migration to the version (keeping also earlier version) needs some wrapper classes for EM Physics List – interface change in G4 classes causes serious problem to us