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Subject: Geometry overlaps!!!!

Posted by [Mohammad Al-Turany](#) on Fri, 24 Apr 2009 07:36:52 GMT

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Hallo Detector experts,

It seems that there is a lot of problems in the Panda geometry which cause the simulation to crash specially when using new packages of ROOT and VMC (ROOT 5.23.2, Geant4.9.2.p1, etc). I attached to this mail 2 root files with:

overlaps.root:

obtained using the FullSolenoid.root file for the Soleniod and the macro run\_sim1.C.

in this file you will see 447 overlaps! mostly between MDT and Soleniod

V833\_overlaps.root:

the same as before with the PandaSolenoidV833.root as geometry file for the Soleniod. This has also 538 overlaps!

With this geometry as it is now it is almost impossible to run any simulation! I will try to investigate if this has anything to do with the new packages but please take a look also to the overlaps and check your detectors if the geometry is really correct!

To see the overlaps, simply open the attached root file, then open the root browser and double click the FAIRGeom object (TGeo) then you will see a folder Illegal overlaps:

inside this folder you can see the overlaps:

if you double click any of these overlaps you will get some info (names and so on) in the terminal and it will be drawn on a canvas:

Please check this, most of them are small overlaps which could be avoided by using better precision!

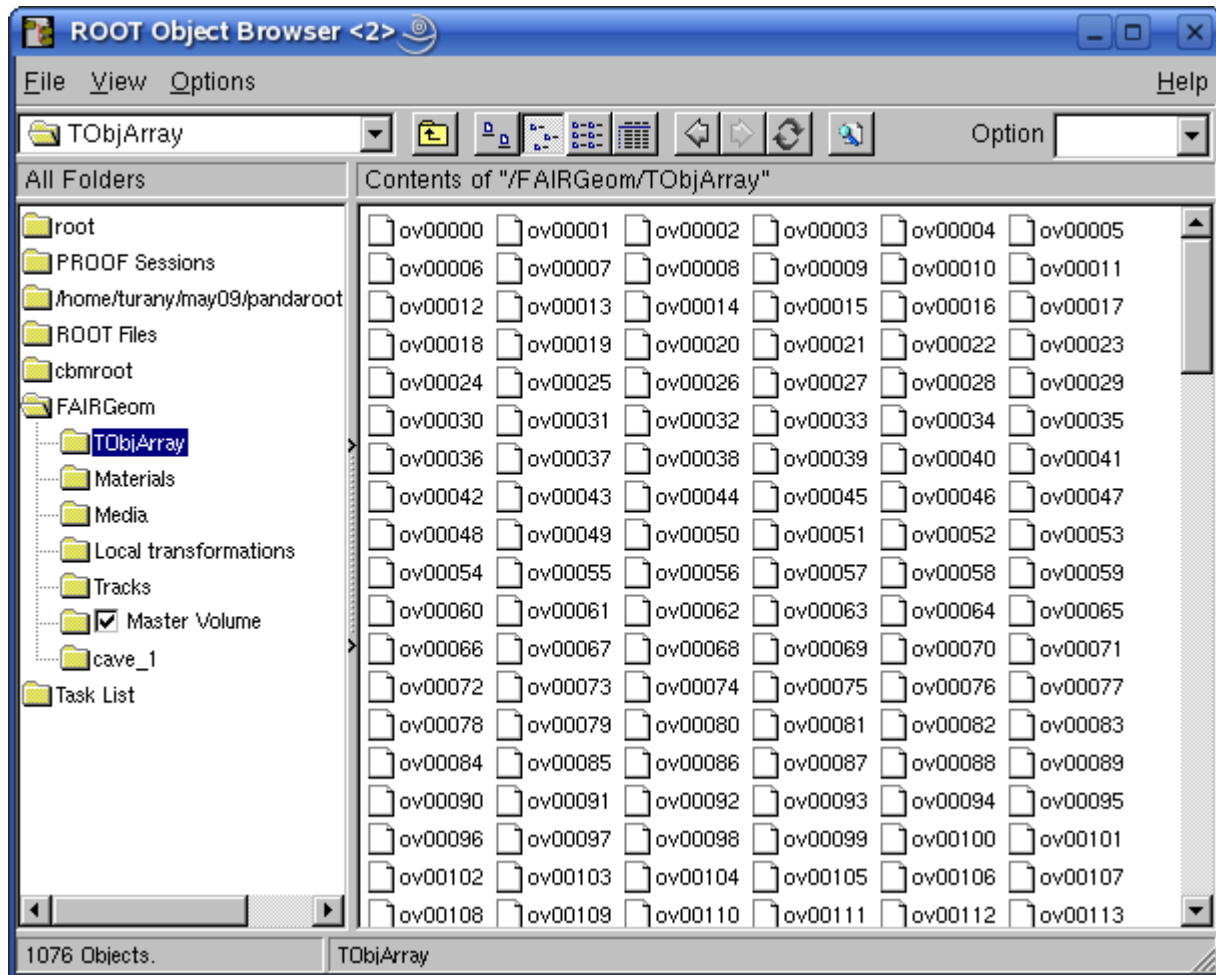
regards

Mohammad

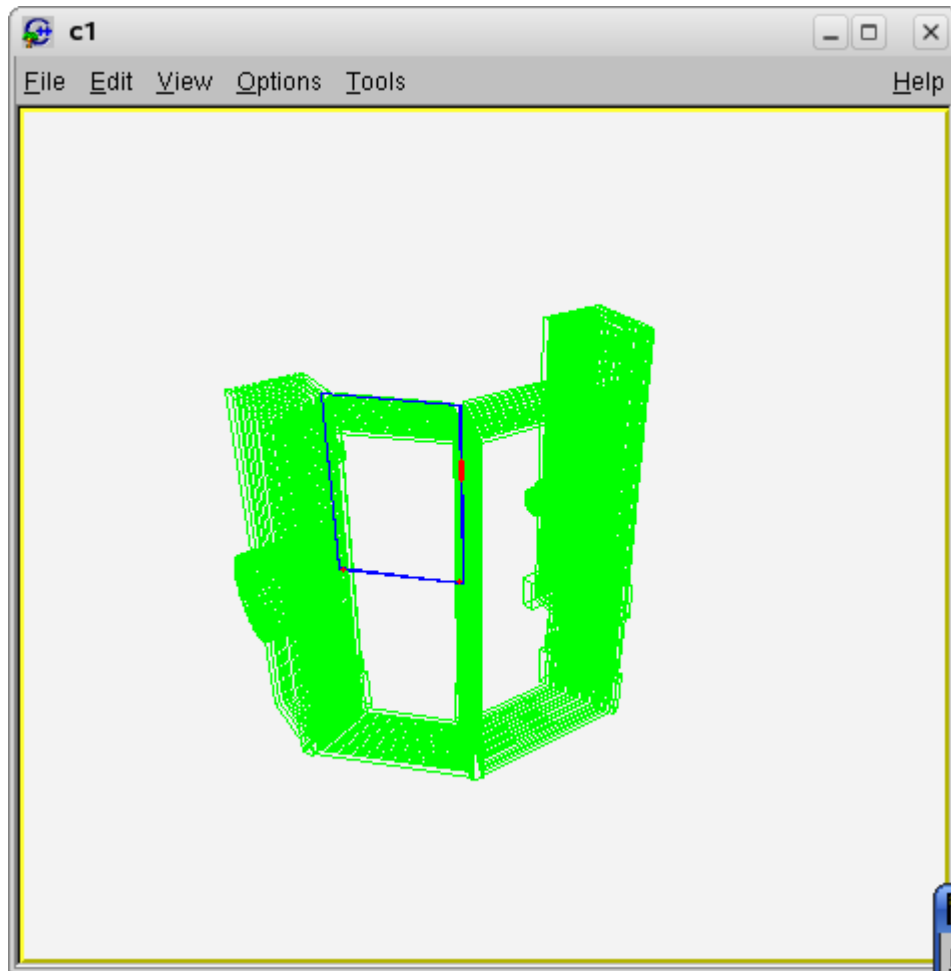
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File Attachments

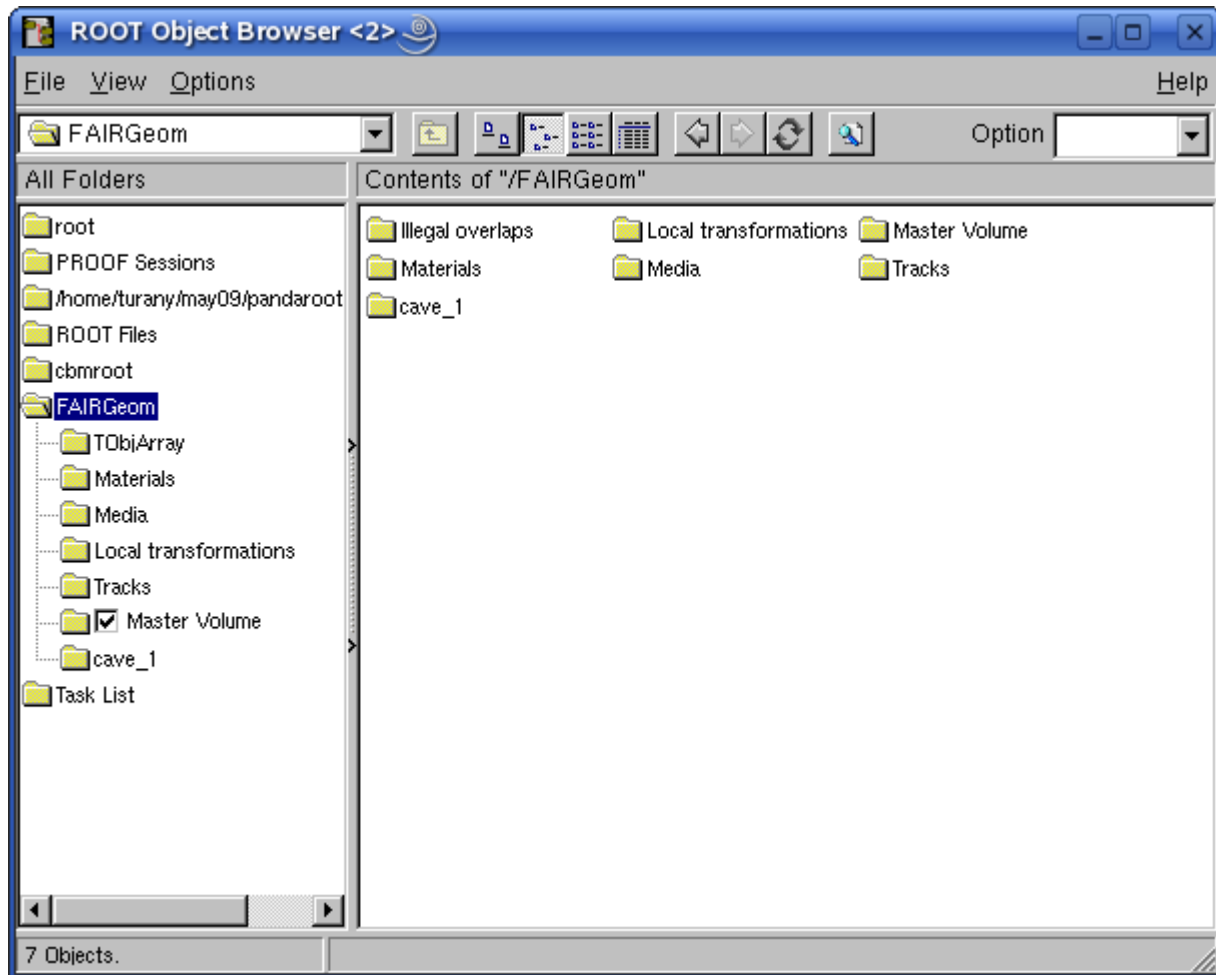
1) [snapshot2.png](#), downloaded 1231 times



2) [snapshot3.png](#), downloaded 1148 times



3) [snapshot1.png](#), downloaded 870 times



- 4) [V833\\_overlaps.root](#), downloaded 489 times
  - 5) [overlaps.root](#), downloaded 484 times
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