
Subject: Re: Geometry overlaps!!!!

Posted by [Aleksandra Wronska](#) on Thu, 30 Apr 2009 12:41:34 GMT

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Dear Mohammad,

I have just created a new version of the dch geometry file dch.root. It is in line with the PANDA model ver. 912 (so pretty recent). I tested it for overlaps with magnets and found three overlaps with the dipole:

- = Overlap ov00000: cave/ms16_0 overlapping cave/dchVol4_0 ovlp=7
- = Overlap ov00008: cave/ms17_1 overlapping cave/dchVol4_0 ovlp=2
- = Overlap ov00009: cave/ms17_2 overlapping cave/dchVol4_0 ovlp=2

A fast and dirty way to eliminate these overlaps (which cause crashes of simulations) would be to remove the ms16_0, ms17_1, ms17_2 volumes from the dipole.geo file. A better solution would be to update the dipole geometry file to have it in line with the current design version. Another argument in favour of the second solution is that there seem to be overlaps even between the dipole volumes:

- = Overlap ov00001: cave/ms16_0 overlapping cave/ms17_1 ovlp=2.96703
- = Overlap ov00002: cave/ms16_0 overlapping cave/ms17_2 ovlp=2.96703
- = Overlap ov00003:
DownstreamoEndcapoV833/DownstreamEndcap1o1oPartAss_1/DownstreamEndcap1o1_1
overlapping
DownstreamoEndcapoV833/PlatesOuterCircumferenceo3oPartAss_1/PlatesOuterC
ircumferenceo3_1 ovlp
=2.96386
- = Overlap ov00004:
DownstreamoEndcapoV833/DownstreamEndcap1o3oPartAss_1/DownstreamEndcap1o3_1
overlapping
DownstreamoEndcapoV833/PlatesOuterCircumferenceo3oPartAss_1/PlatesOuterC
ircumferenceo3_1 ovlp
=2.95181
- = Overlap ov00005:
DownstreamoEndcapoV833/DownstreamEndcap1o2oPartAss_1/DownstreamEndcap1o2_1
overlapping
DownstreamoEndcapoV833/PlatesOuterCircumferenceo3oPartAss_1/PlatesOuterC
ircumferenceo3_1 ovlp
=2.89157
- = Overlap ov00006:
DownstreamoEndcapoV833/DownstreamEndcap1o5oPartAss_1/DownstreamEndcap1o5_1
overlapping
DownstreamoEndcapoV833/PlatesOuterCircumferenceo3oPartAss_1/PlatesOuterC
ircumferenceo3_1 ovlp
=2.87952
- = Overlap ov00007:
DownstreamoEndcapoV833/DownstreamEndcap1o4oPartAss_1/DownstreamEndcap1o4_1
overlapping
DownstreamoEndcapoV833/PlatesOuterCircumferenceo3oPartAss_1/PlatesOuterC
ircumferenceo3_1 ovlp
=2.79518
- = Overlap ov00010: cave/md05_3 overlapping cave/md07_2 ovlp=1.86286
- = Overlap ov00011: cave/md05_2 overlapping cave/md07_1 ovlp=1.86286
- = Overlap ov00012: cave/md05_1 overlapping cave/md07_1 ovlp=1.86286

Will you take care of that?

cheers,
ola
