
Subject: Re: Detector geometries in own folder
Posted by [Lia Lavezzi](#) on Tue, 21 Apr 2009 11:29:41 GMT
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Hi Tobias, Stefano and Mohammad,

I have a problem in inserting the tubes into the two containers (one for each side of the target pipe, as Stefano suggested).

Let me show you the problem: in the first figure attached here you can see the front view of the STT detector:

In the second figure I try to explain the problem:

I need a shape like the upper one (yellow region), to follow the boundaries of the STT (not to overlap with outer detectors and with the target pipe): it is a sort of cylinder with a cut in the middle.

The only shape I could be able to use is the TUBS, but in this case I have a container which is shaped like in the bottom figure (yellow region again), and so there is the risk to overlap with the target pipe. Even if this did not happen, there would still be the problem that I add a new volume, though filled with air, that forces geant and geane to make a step at the volume boundary, while no forcing is needed here, since the material is the same. So I obtain different hits in the tubes, with respect to the no-container geometry... I would prefer to have a container exactly of the same dimensions/shape of the STT.

Does anyone have any idea how to obtain such a shape? I didn't find this shape in the usual ones, is it there and I did not see it? This could be obtained with boolean operations, but since I use the .geo file it is not possible I think.

Is this the only option to be able to switch off all the tubes at the same time? Can't we add some sort of "button" in the display in order to be able to delete all the detectors starting with stt at the same time? Mohammad, what do you think, is this solution feasible?

If no other solution exists, I think I should rewrite the algorithm of tube positioning in order not to use the .geo file anymore, but to construct the geometry in some other way (I saw some examples), but this will take some time.

Thank you and ciao,
Lia.

File Attachments

- 1) [stt-front.png](#), downloaded 526 times
 - 2) [shapes.png](#), downloaded 463 times
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