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Status of
the Cleanup procedure
in the 'Road Method'
pattern recognition

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The Cleanup procedure

Efficiency of the Pattern recognition code with the use of both a road finding and a Hough transform algorithms has been shown to be satisfactory many times in the past in the ideal situation when no pileup caused by the 20 MHz interaction rate.

As I said many times when the realistic pileup situation is turned on a 'Cleanup' procedure is necessary to eliminate the spurious tracks remnant of previous events OR subsequent events.

Both the central Stt detector and the Mvd detector are used to check if all the hits that are supposed to be there for any given track are actually present. If not, the track is eliminated as spurious.
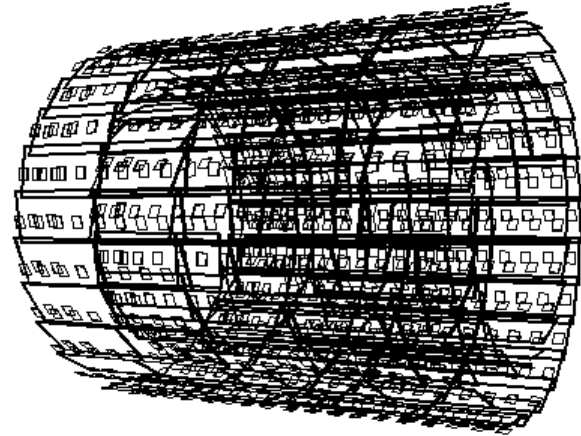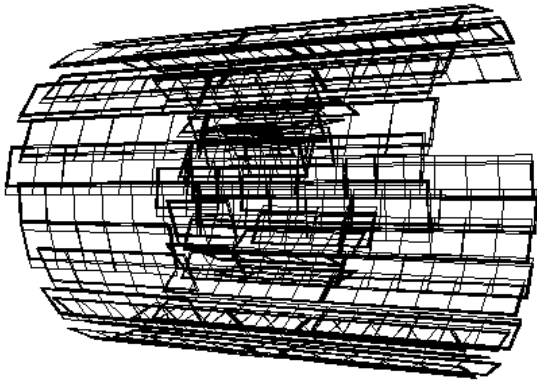
The Cleanup procedure

Presently I am finalizing the Mvd part of the Cleanup procedure. All tracks found are required to have at least 90% of the Mvd hits that are supposed to be there after taking into account the Mvd sensitive layers.

Progress is slow because of my obligations in teaching and the other experiment I am involved, nevertheless :

I managed to use the root file of the official Mvd geometry :
`geometry/Mvd-2.1_FullVersion.root`
to extract the info on each sensitive volume : position relative to MARS and orientation, dimensions, with the `root` geometry tools.

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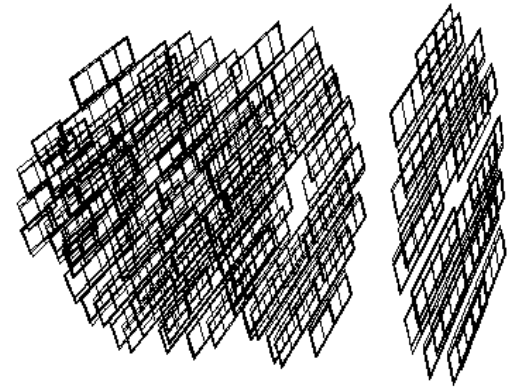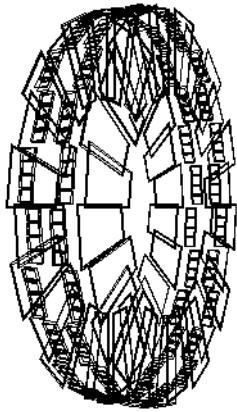
The Cleanup procedure

Now I am writing the class that uses the complete info of the sensitive volumes to perform the check of the hits present and missing.