Upcoming changes to straw tracker geometry

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Straw tracker (barrel)



CURRENT GEOMETRY

The uppermost (and the widest) layer with oblique straws

 The lowest (and the narrowest) layer with oblique straws

The tubes, one end of which comes out on the side of the module, will be **removed**, because no solution was found how to connect them to the gas system.

AFTER REMOVAL OF «SHORT» TUBES

 \sim ≈ 20% of area is lost !

- ≈ 55% of area is lost !!!

For $\alpha = 3^{\circ}$ about 12 tubes are removed from each side of the layer.

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Lost area is proportional to $tan(\alpha) \approx \alpha$, so for $\alpha = 2^{\circ}$, it will be 1.5 times smaller.

Conclusions

- Lack of communication from the side of hardware people.
- Number of hits in u/v layers for certain tracks will be severely reduced.
- Probably, this will negatively affect tracking to be studied.