Status of Mechanical Design of the Vertex Detector of MOST2

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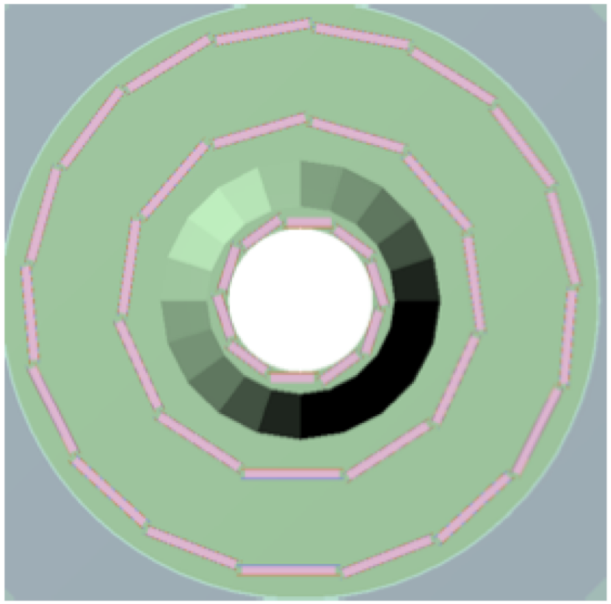
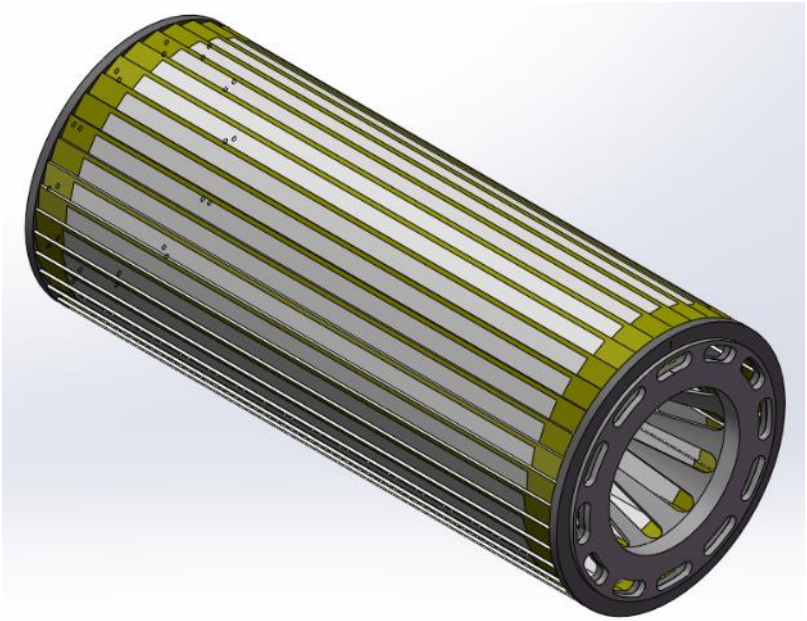
Vertex Detector Parameters in Preliminary Design



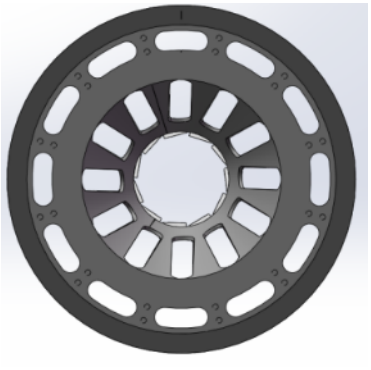
	$R(mm)$	$\|z\|(mm)$	$\|cos\theta\|$	$\sigma(\mu m)$	$Readout\ time(us)$
Layer 1	16	62.5	0.97	2.8	20
Layer 2	18	62.5	0.96	6	1-10
Layer 3	37	125.0	0.96	4	20
Layer 4	39	125.0	0.95	4	20
Layer 5	58	125.0	0.91	4	20
Layer 6	60	125.0	0.90	4	20

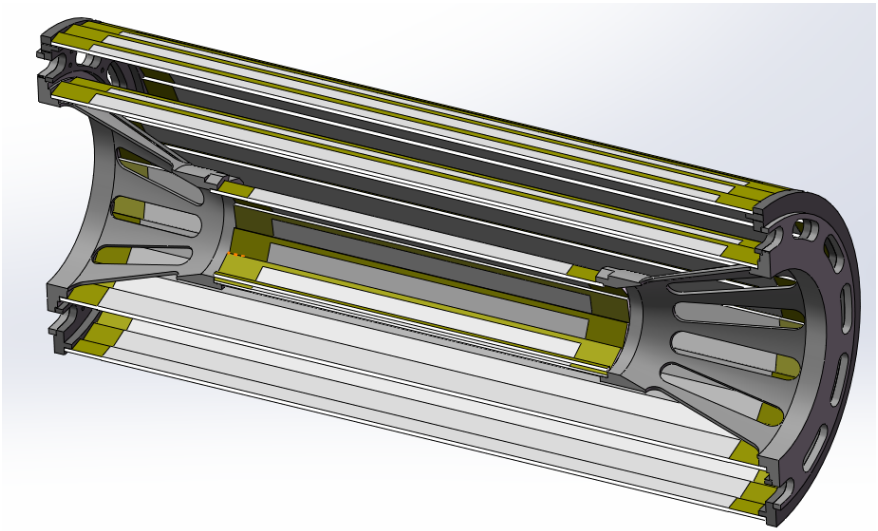
Table 4.1: Vertex detector parameters

Current VTX Support Design



Side view





Sectional view

Current VTX Support Design

At the initial stage and the conceptual design just started.

Lack of information input :

- boundary conditions are not clear.
- interface with accelerators(beam pipe) and other detectors .
- Module design not started

Currently , being familiar with the CEPC detector and try to figure out the related conditions.

Advices and Reminders?

- Materials (fabrication-precision control for the carbon fiber part, simulation & test?)
- Ventilation & cooling- test & simulation?
- Module fabrication
- VTX Detector assembling (locating , measurement, precision control)