

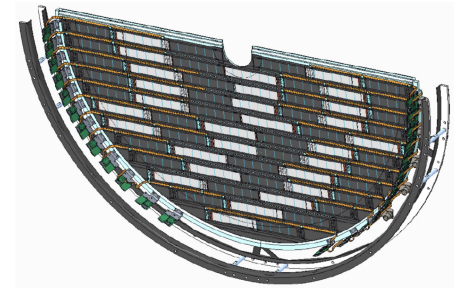
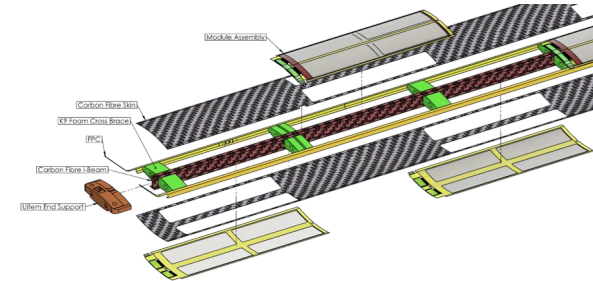
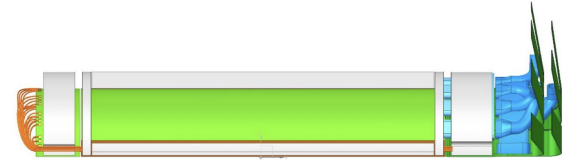
Project – SVT meeting, TIC short summary

Meeting past Friday, October 18, 2024
Indico: <https://indico.bnl.gov/event/25078>

Mechanics

Increasingly realistic CAD designs for IB L0 and L1, OB, and disks

- IB L0 and L1 was one of the main topics at the SVT workfest at Lehigh; IB L2 has been less advanced,
- Likewise, OB and disk designs have been worked out considerably further,
- Initial designs for several of the global supports have been developed, including the support cylinder – its outer radius is the outer envelope (SVT services will be routed inside),
- Models have been brought together, of course bringing out some interferences (none fundamental); they are being worked through as part of internal integration.
- Importantly, SVT continues to prefer segmentation in top-bottom halves over left-right halves. As discussed at the meeting, other tracking detector designs currently have a left-right segmentation. Identified as a follow-up item.
- A further topic discussed was the (proposed) assembly sequence and associated needs.



Electronics and services

SVT will have four read-out boards:

- Interface board, hosting VTRx+
- Control board,
- Power board,
- Aggregator board

Functional details, dimension and locations, power dissipation discussed in the meeting and in the posted materials.

Services were a further topic – combination of many factors.

Of possible relevance here,

- VTRx+ needs 1.2V, 2.5V, and I2C – this likely holds across all use cases in ePIC and may benefit from a common approach. (Associated services will of course need to be folded into the overall service update.)
- Grounding remains partially open – identified as a broader topic.