

Outer/Inner Tracker Support Structure meeting

Summary

Ruud and Henk presented the latest design of the support structure of the Outer Tracker system. The structure stays now within OT/IT envelope and does not interfere with the RICH 2 detector. Pillars are in between Magnet and T1 and downstream between T2 and T3. This limits the space for the Inner Tracker IT1 and IT3 to 200mm, when retracting this system from the beam line. 190 mm will be allocated to the Inner Tracker for both stations, while for IT2 & radiation monitor 220 mm are reserved.

Due to access difficulties, the Inner and Outer Tracker will move independently lateral to the beam line.

The outer Tracker system can not be fully retracted with the present design on the cryo side, which hampers the access to the OT inner part on this side. To access the inner part of the Tracker (IT & OT) system, the Outer Tracker half on the PZ side has to be moved 800mm beyond the pillars. A light construction to the bunker on this side has to be added to guide the station and services.

The service boxes of the Inner Tracker are difficult to access, if keeping them below the IT detector boxes. The alternative to place the service boxes on top of the support structure does not allow moving them together with the IT. For access and integration reason the best position for the services boxes is clearly outside the structure.

The radiation monitor will be placed on the IT2 as there space is available between IT2 and the support structure.

The total weight of the support structure, the Outer/Inner Tracker and the services with boxes together with the position of the pillars has to be transmitted to Joao within the next days (3rd March).

A mockup of part of the OT support system will be build at NIKHEF before summer '04.

To be defined for next meeting:

- Access to inner part of the tracking system
 - Larger opening on the PZ-side
 - Alternative??
- Rail system for the Inner Tracker
- Radiation Monitor position
- Position of the IT service boxes
 - Bottom, top, outside ...
- Cable trays and service routes inside the system for
 - IT
 - OT (preliminary design exists)

Next meeting 26th March, NIKHEF