

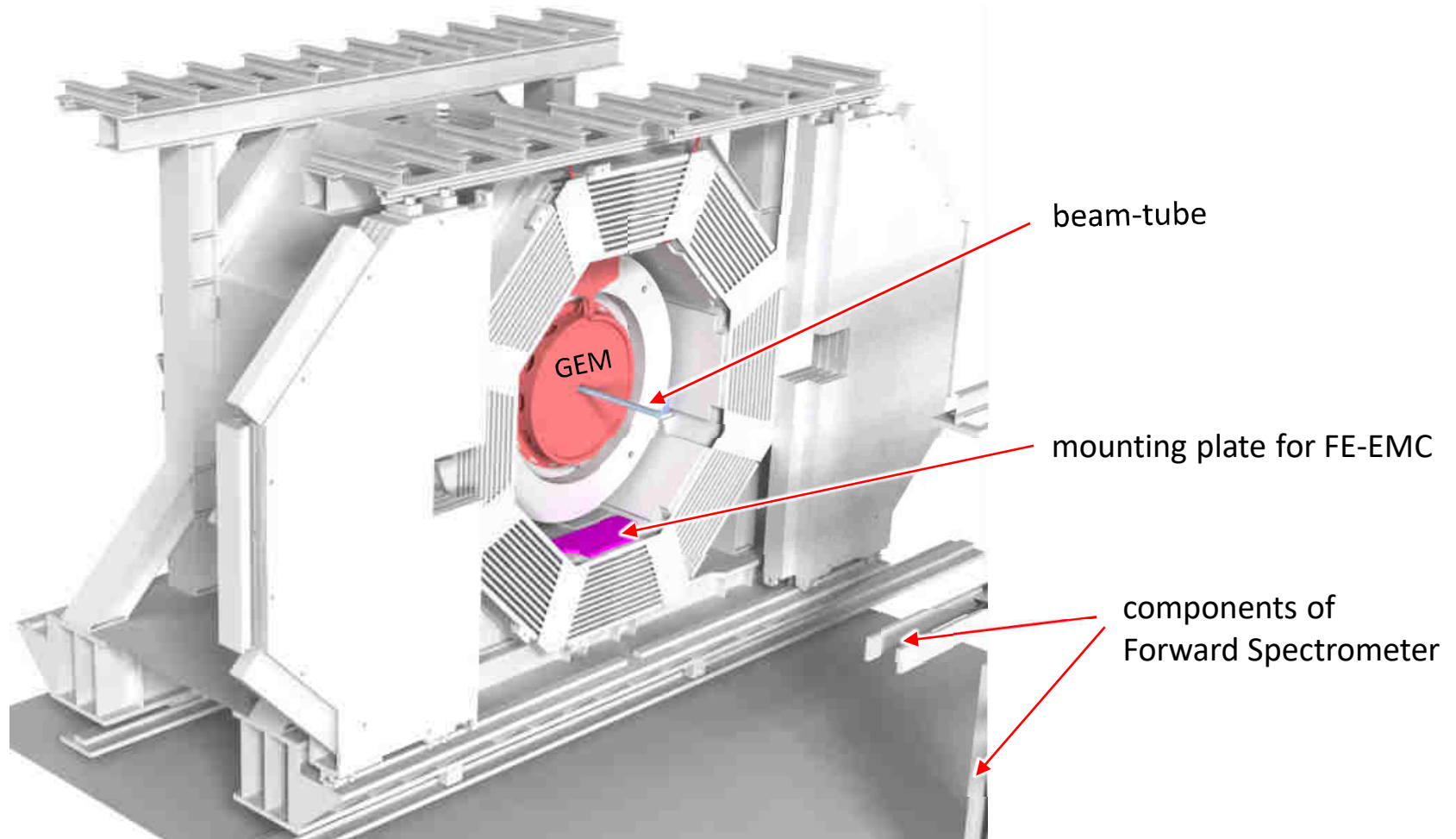
FE-EMC Installation

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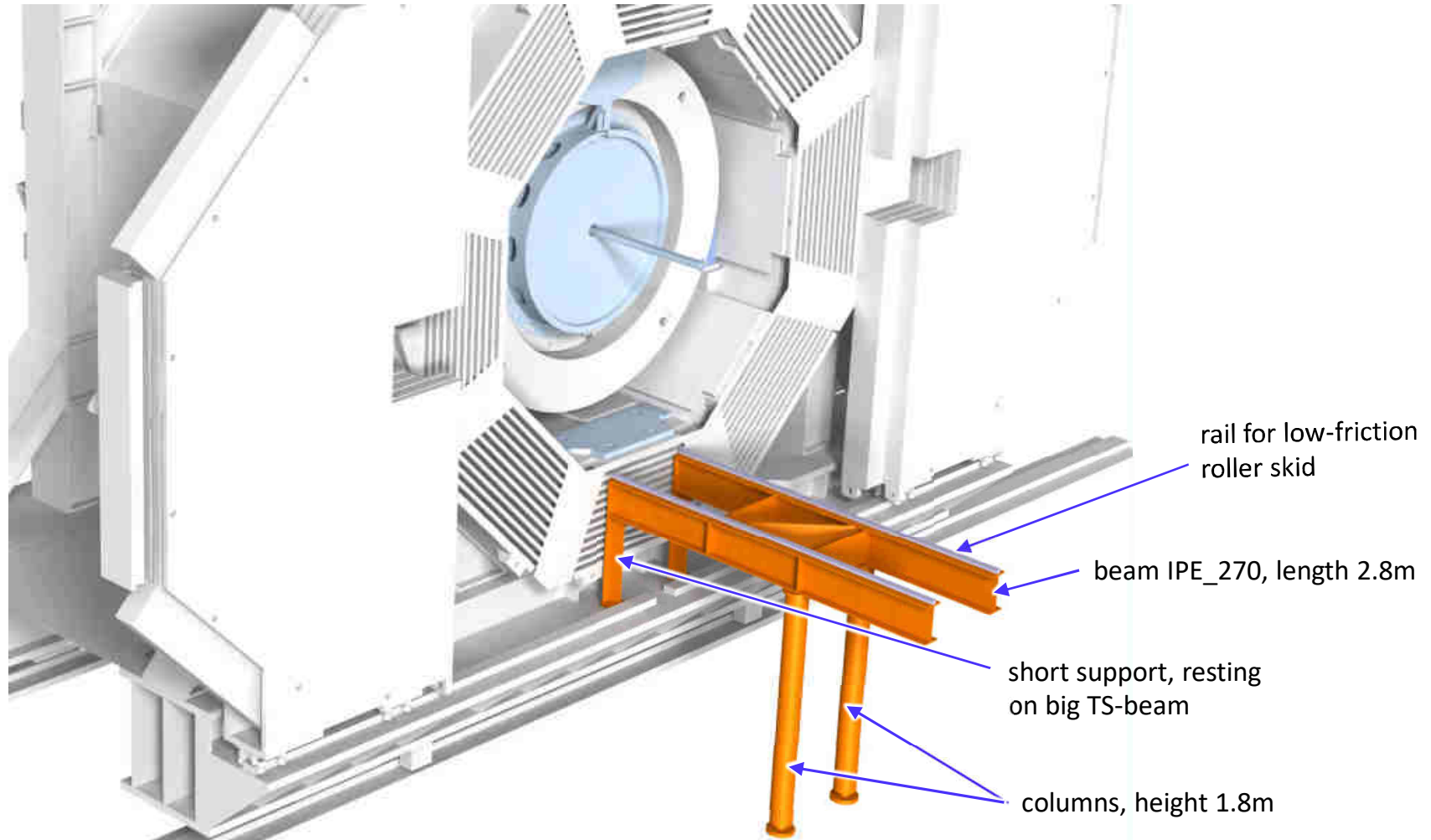
- Area downstream of the TS before installing the FE-EMC
- Rail system for FE-EMC
- Start position of FE-EMC
- End position of FE-EMC
- Use of support for moving-in other components
- Downstream support of big installation beam
- Issues to be solved

Area downstream of the TS before installing the FE-EMC



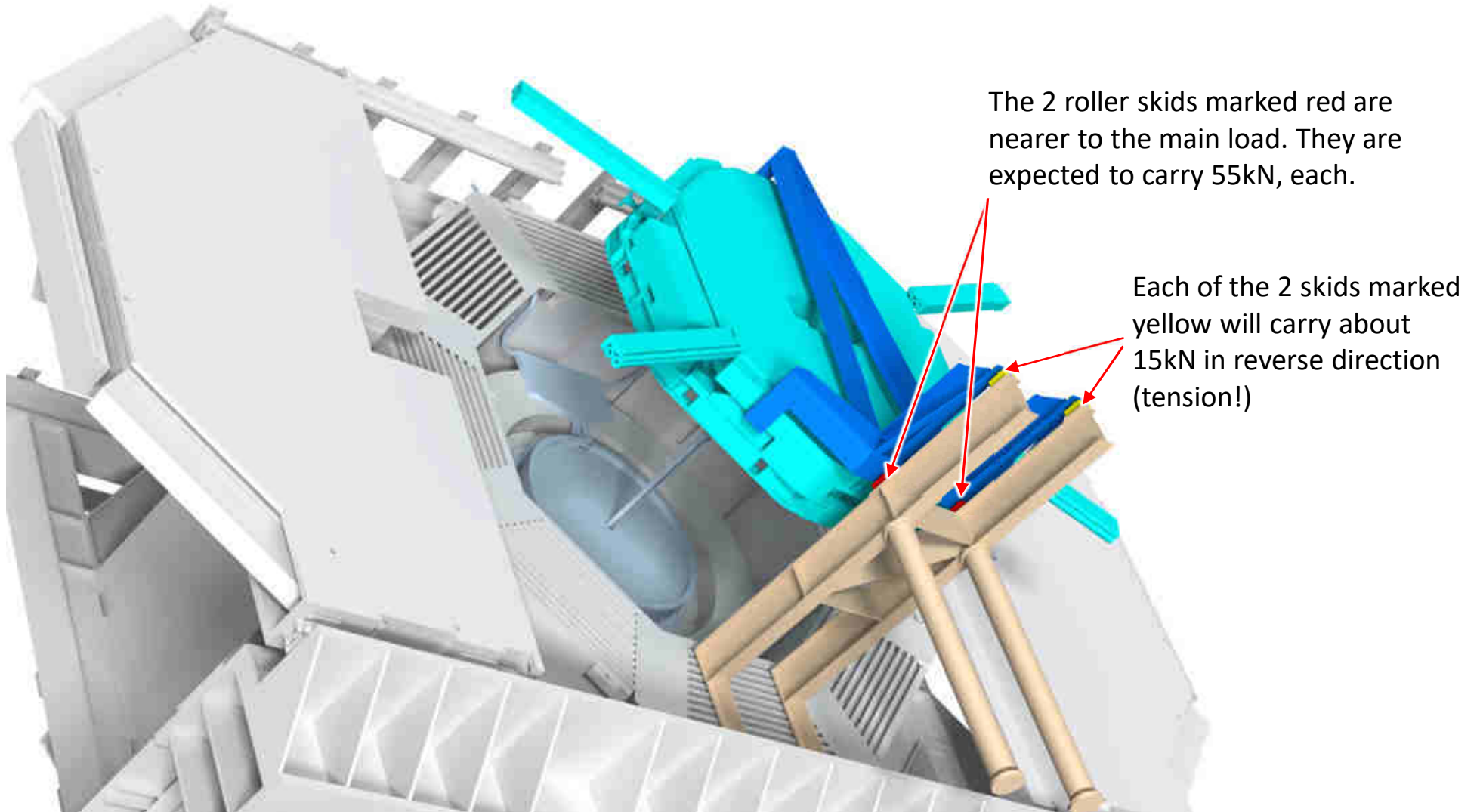
View on downstream side of the Target Spectrometer in the maintenance area. The GEM-tracker is already installed, the beam-pipe shown ends 2.9 meters downstream of the Interaction Point. On the right, there are shown some components of the Forward Spectrometer (just to illustrate that the space for installing the FE-EMC is limited).

Rail system for FE-EMC



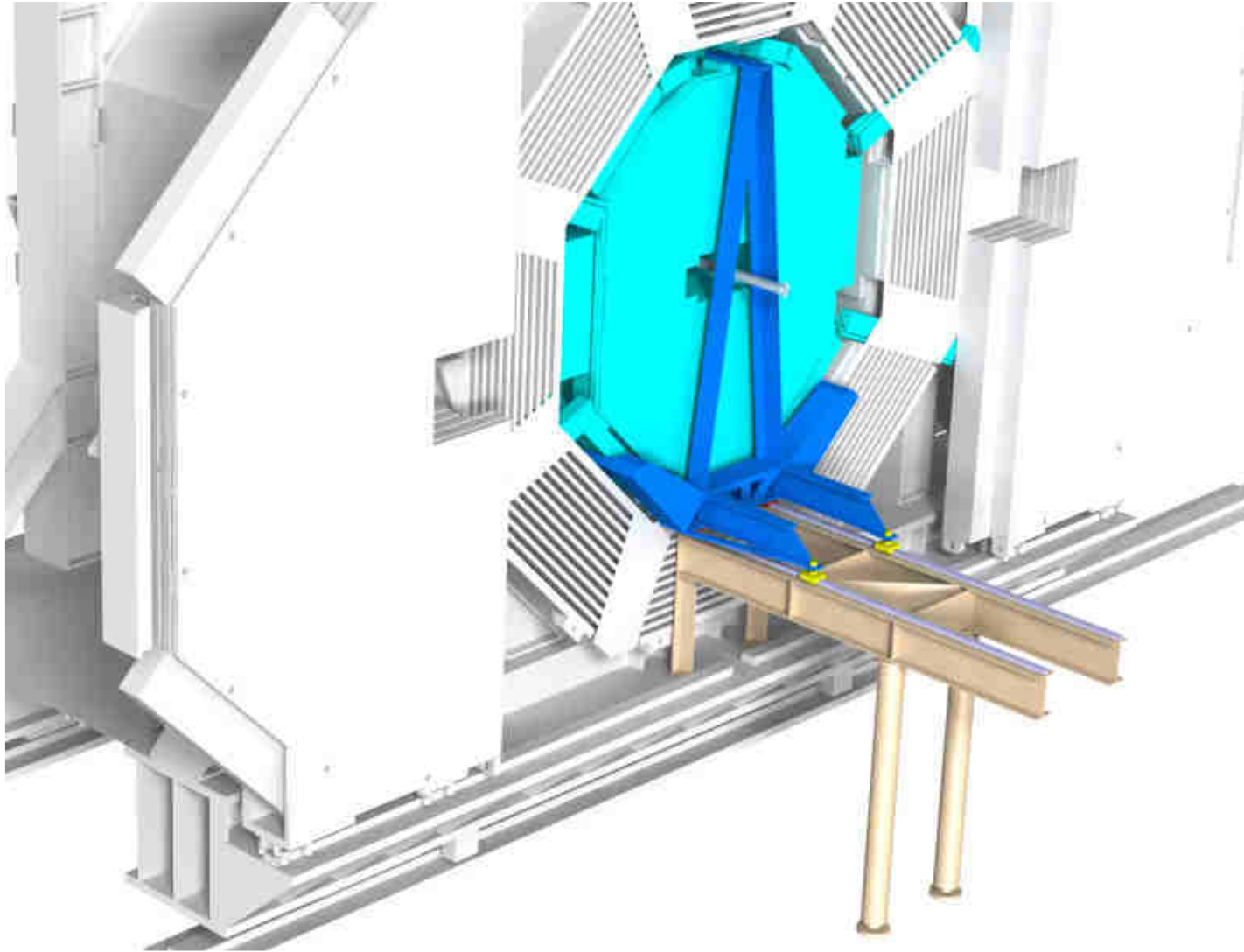
Rails, beams, and supports for FE-EMC movement are installed

Start position of FE-EMC

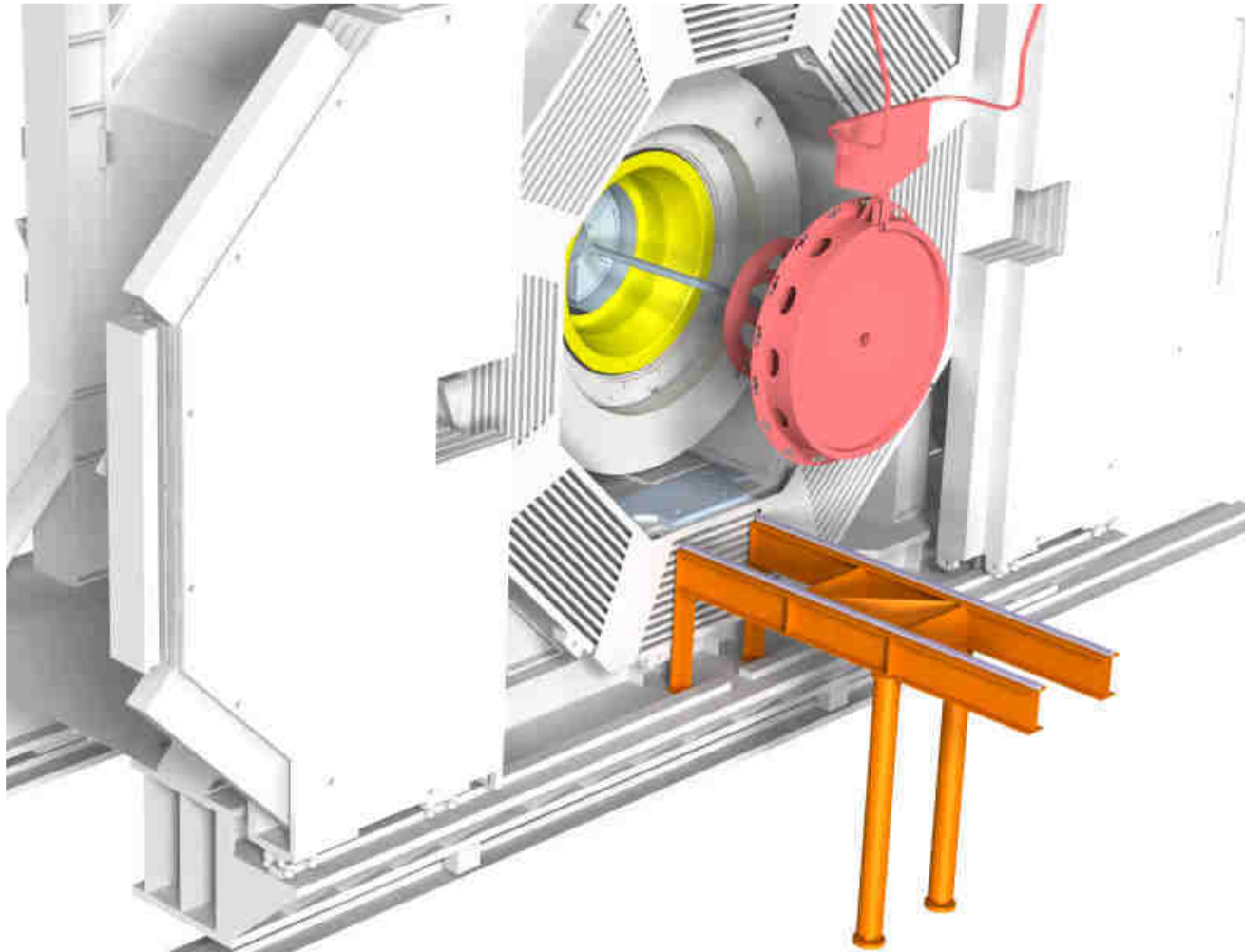


Trolley (marked blue), loaded with FE-EMC (turquoise) and Disc-DIRC (closely attached to the FE-EMC, not visible here) .

End position of FE-EMC

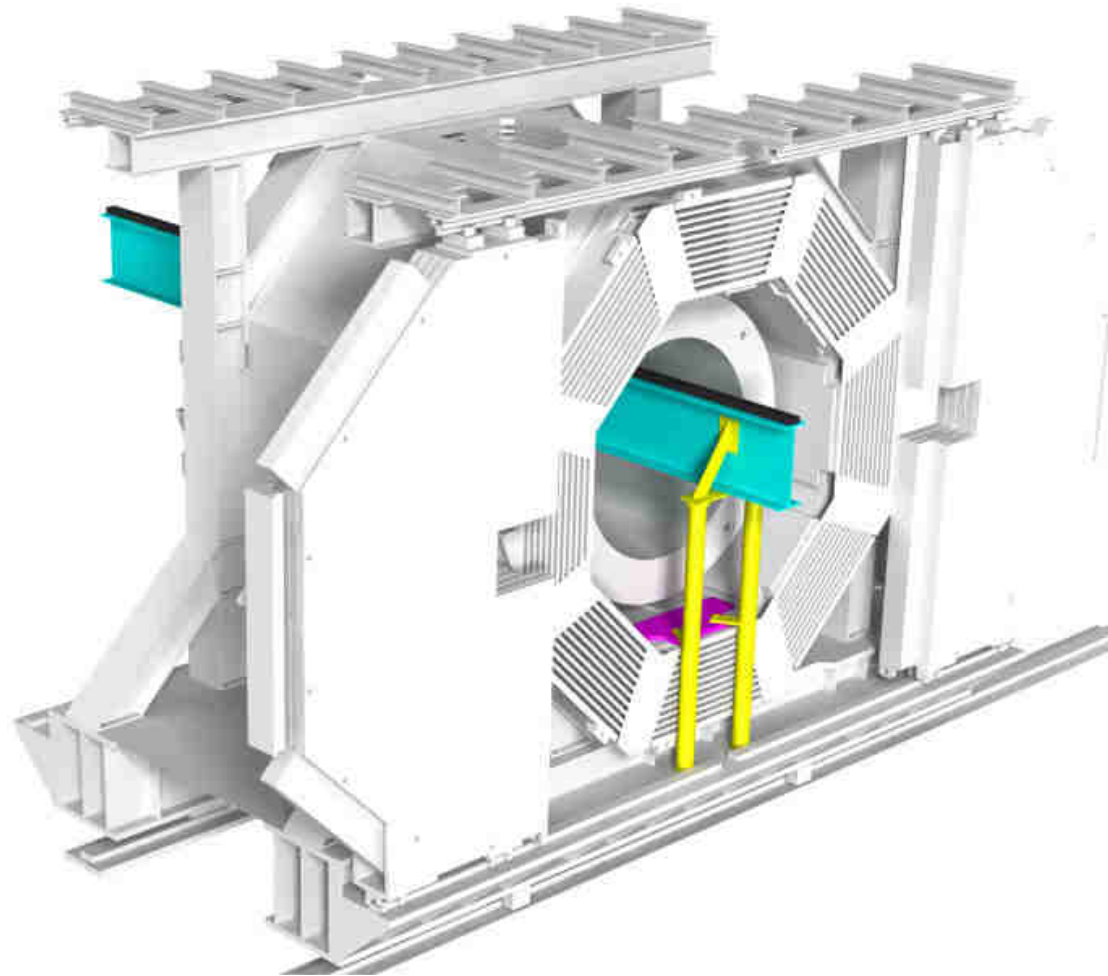


Use of support for moving-in other components



The set-up with supports and rails can be used for moving-in other components, for instance the GEM-tracker or the support cone (marked yellow) which supports the STT and other central components.

Downstream support of big installation beam



A big installation beam (length 900 cm, height 70 cm, marked turquoise here) will be used to move the cryostat and the barrel-EMC into the solenoid yoke from the upstream side. No voluminous scaffold will be needed to support this beam on the downstream side. Supports (yellow) resting on the rail cornices for the downstream door wings seem to be sufficient. Maximum load at this end of the big beam 15 tons.

Issues to be solved

There are still a lot of issues to be solved, the main ones:

- Definition of geometric interfaces between detector and trolley
- Transfer of detector from its transport frame to trolley
- Load transmission from detector to trolley
- Placing the trolley with its load onto the rails
- Accessibility of positioning screws