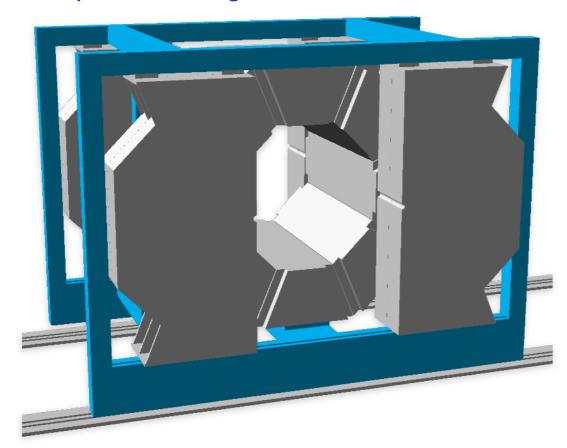
Support frame for ECal and magnet coils (discussion of possible options)

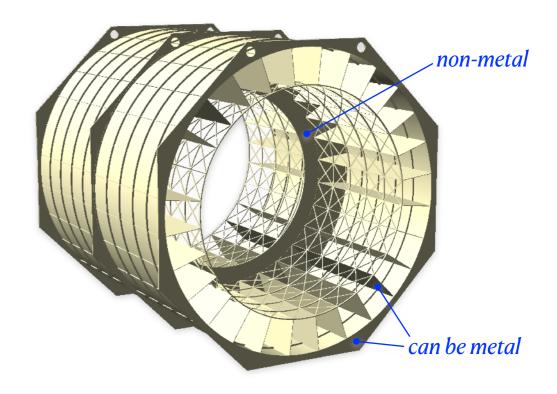
Alexander Korzenev, JINR/LHEP

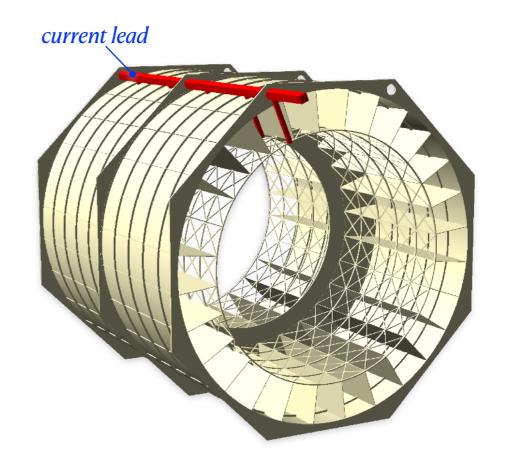
SPD HW meeting Feb 11, 2021

1-st step of assembling

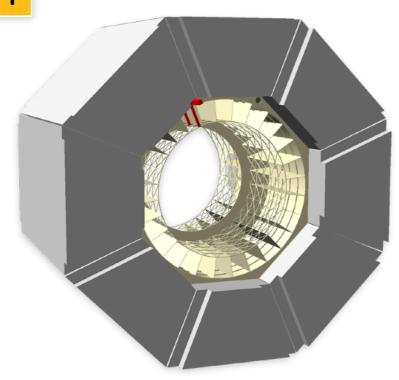


- Principal difference for the ECal support frame between MPD and SPD: inside or outside the coils
 - Our support frame can be metallic (magnetic)
- Cells of ECal are grouped into semi-sectors with weight less than 1t
 - Talk of OG on Jan 21
- How do we connect the magnetic coils with the current leads?
 - remove one row of ECal cells and use this space for the leads (hole in acceptance)
 - Make one row unremovable -> access to backside FE through the adjacent compartment
 - What is the cross-section of the current leads?

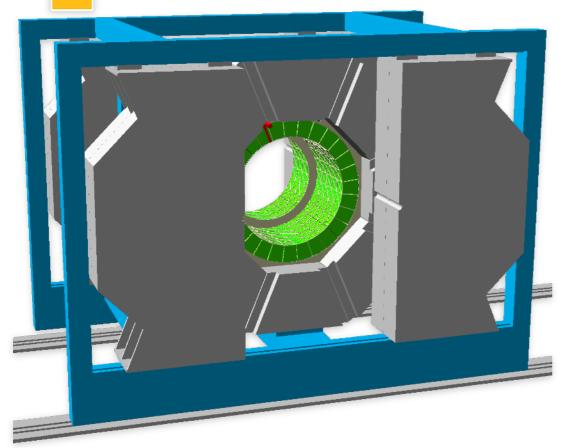


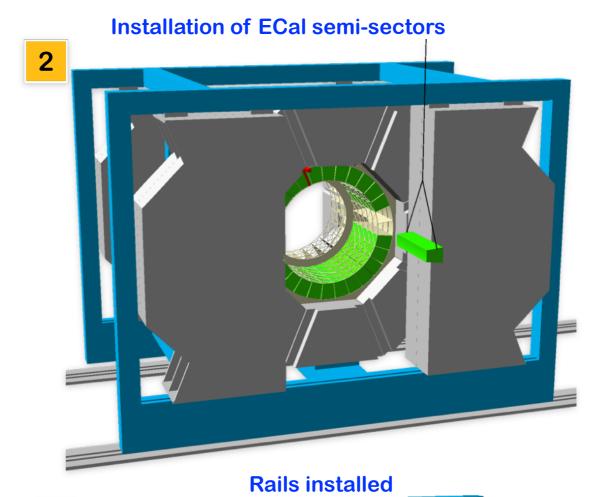


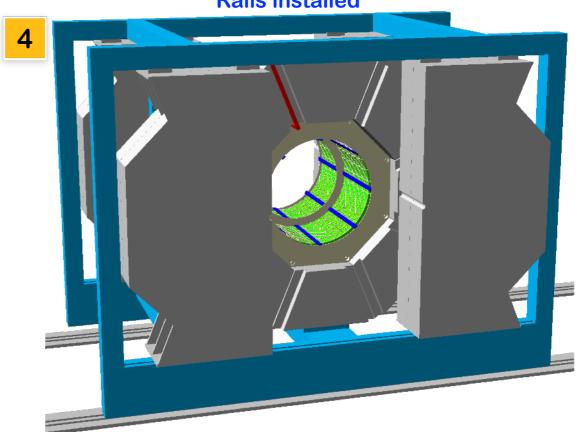
The frame installed

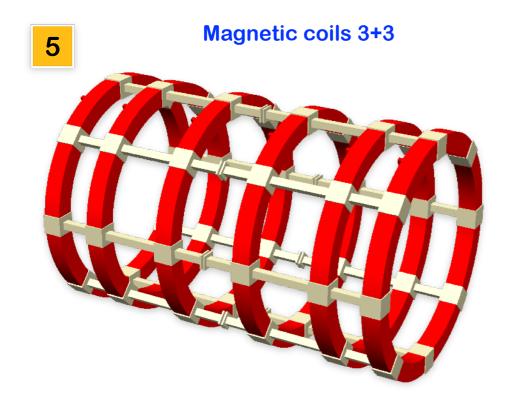


3 ECal semi-sectors installed

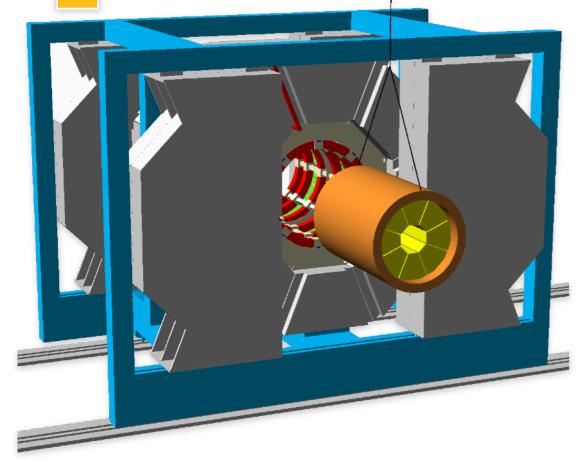




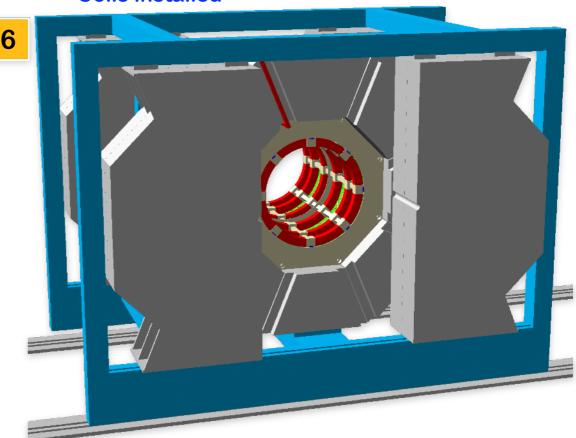






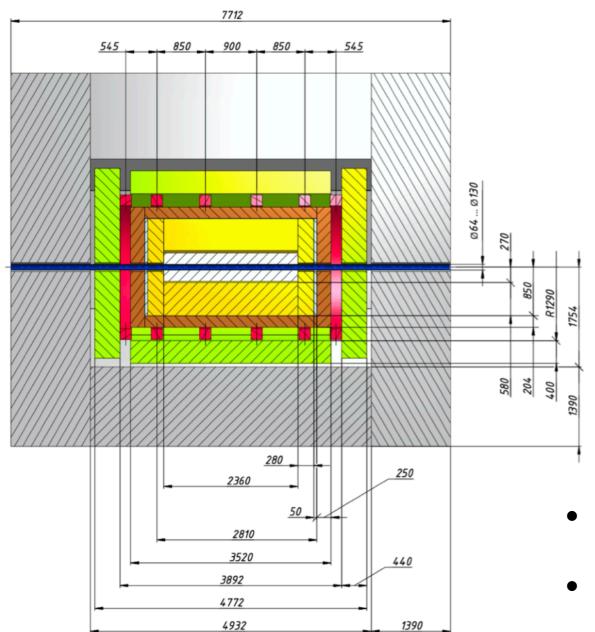


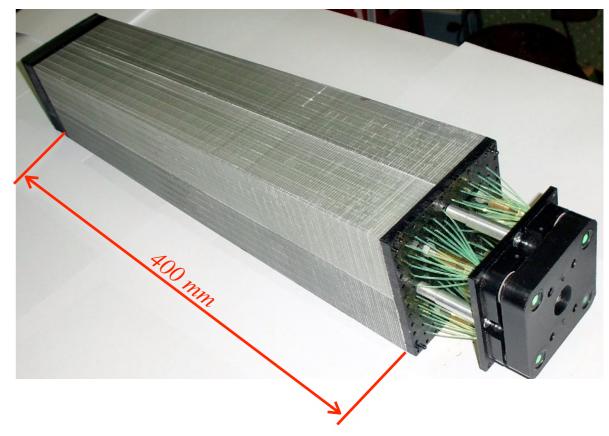
Coils installed



- Coils will be connected to the current leads once inserted
- Questions about the coils
 - weight of a single coil?
 - how rigid is the housing of coil?
- Installation of TOF+ST+BBC+VD to be discussed in a week(s)

Not enough space for ECal





- Distance between coils and RS
 - 1754 1270 = 484 mm
- Distance for frames + electronics
 - 484 400 = 84 mm
- 2 cm margin from both sides for frame
 - $84 2x^2 = 44 \text{ mm}$
 - not enough space!!!
- We need to find extra ~5cm or place ADCs outside

backup slides

