

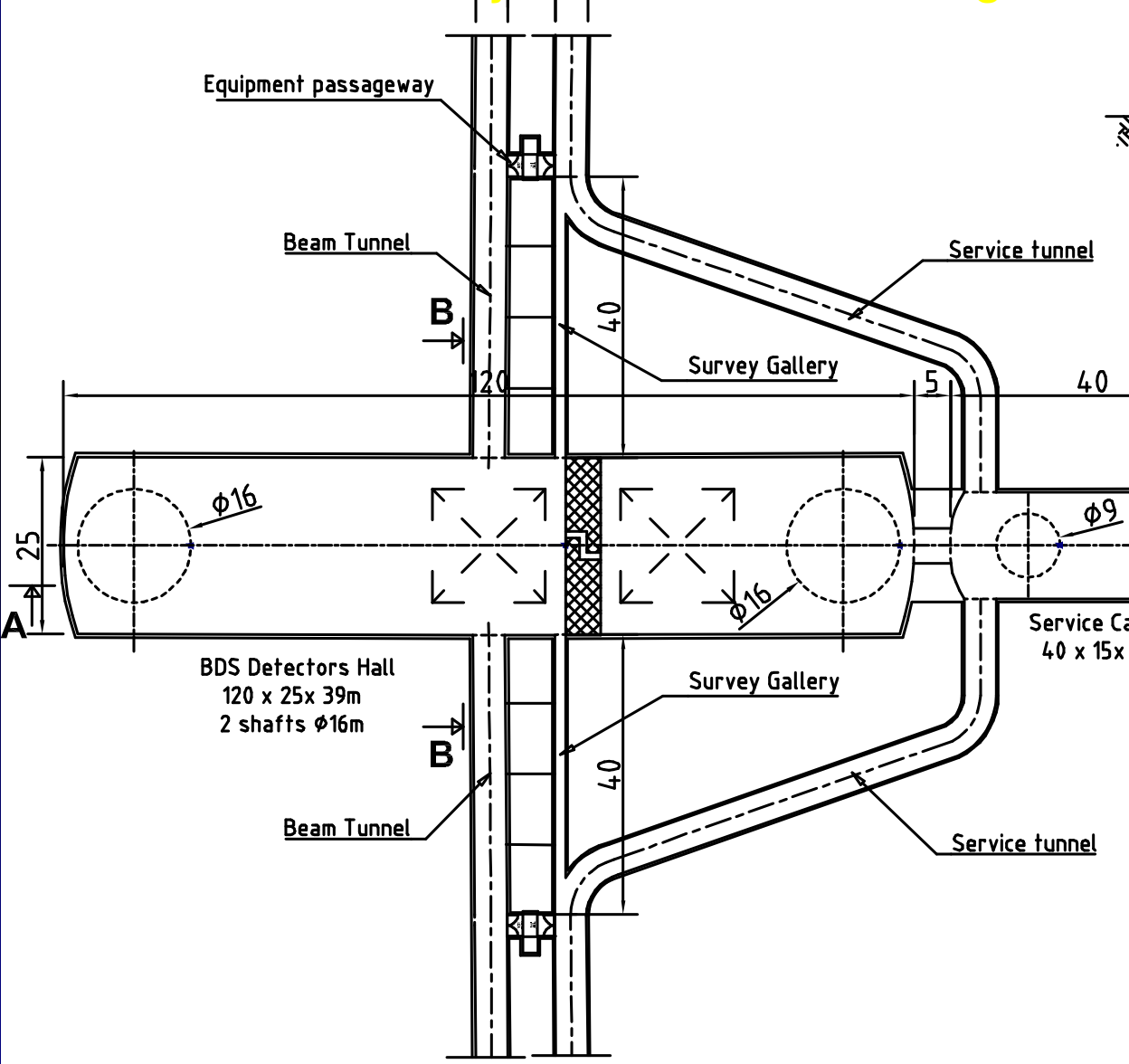
ILC experimental area

- How to 'develop' CFS details for TDP (cavern size, number of shafts, HVAC, EL spec etc) ?
 - KEK site specific issues

CFS V.Kuchler FNAL, A.Enomoto KEK, J.Osborne CERN

ILC-GDE Beijing March 2010

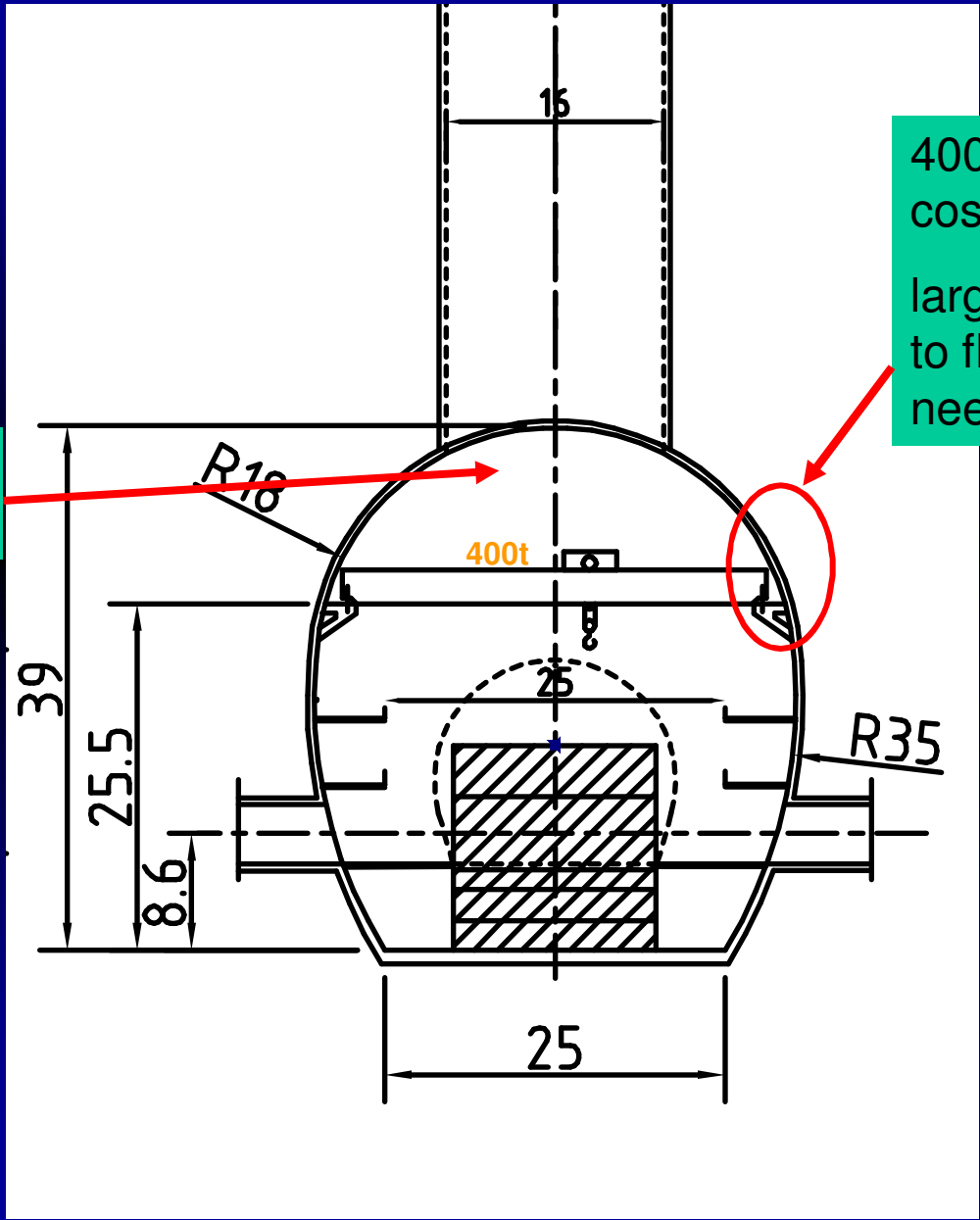
ILC RDR Baseline Layouts for Interaction Region



RDR Baseline for IR cavern

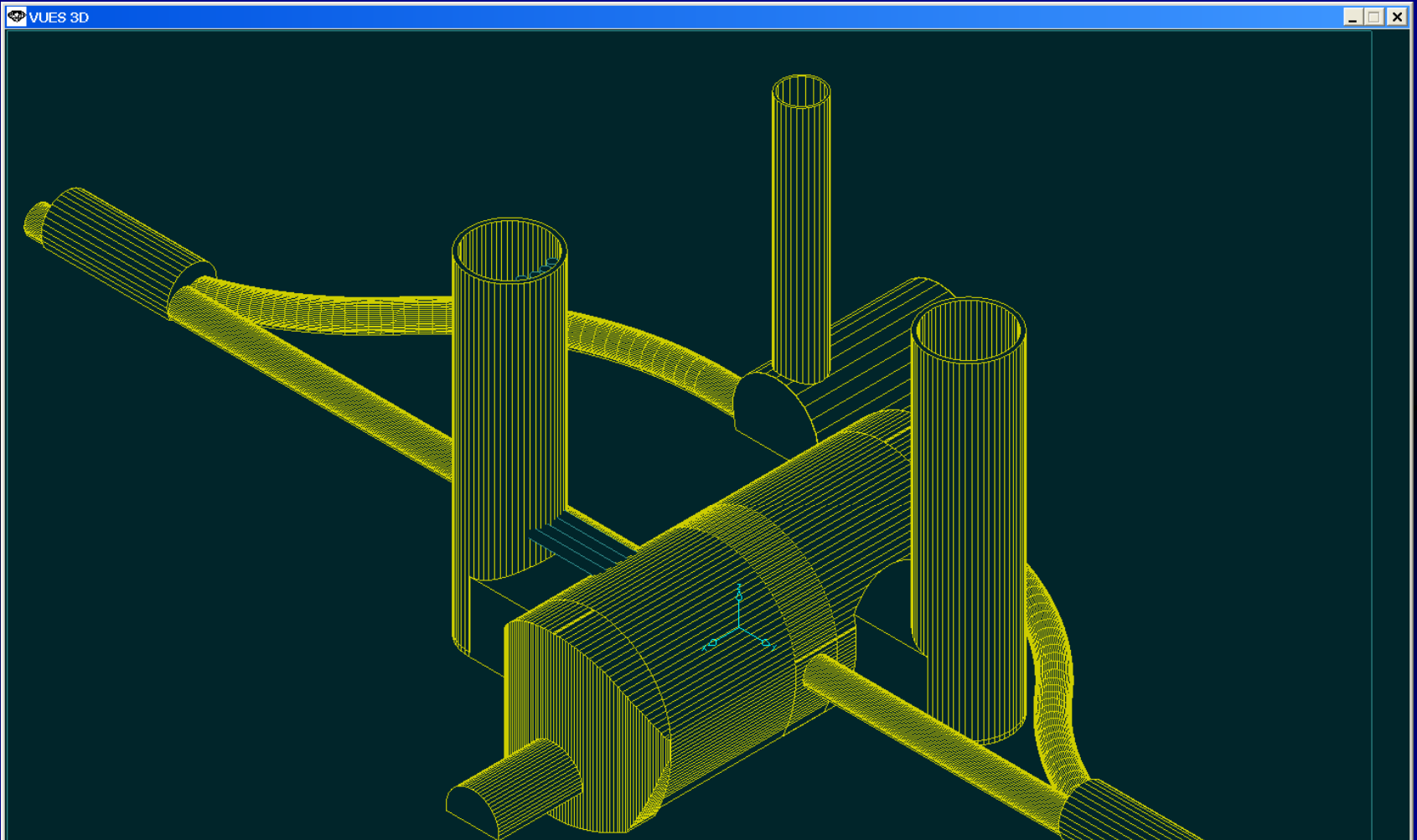


Lot of lost space



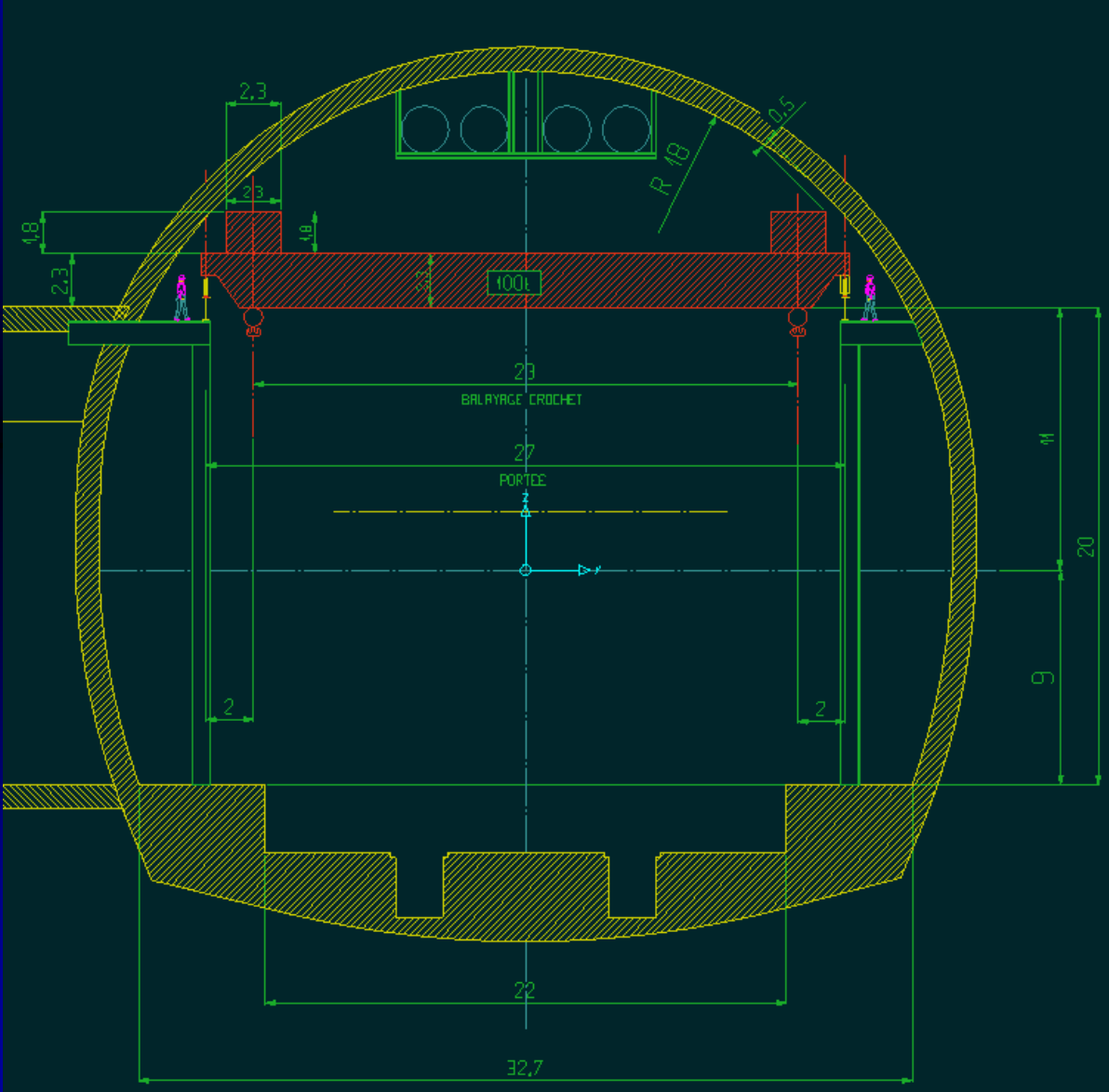
400 ton gantry crane is the cost driver
large steel columns down to floor level would be needed

Possible layout for ILC Interaction Region for Deep Tunnel Solution using CMS concept

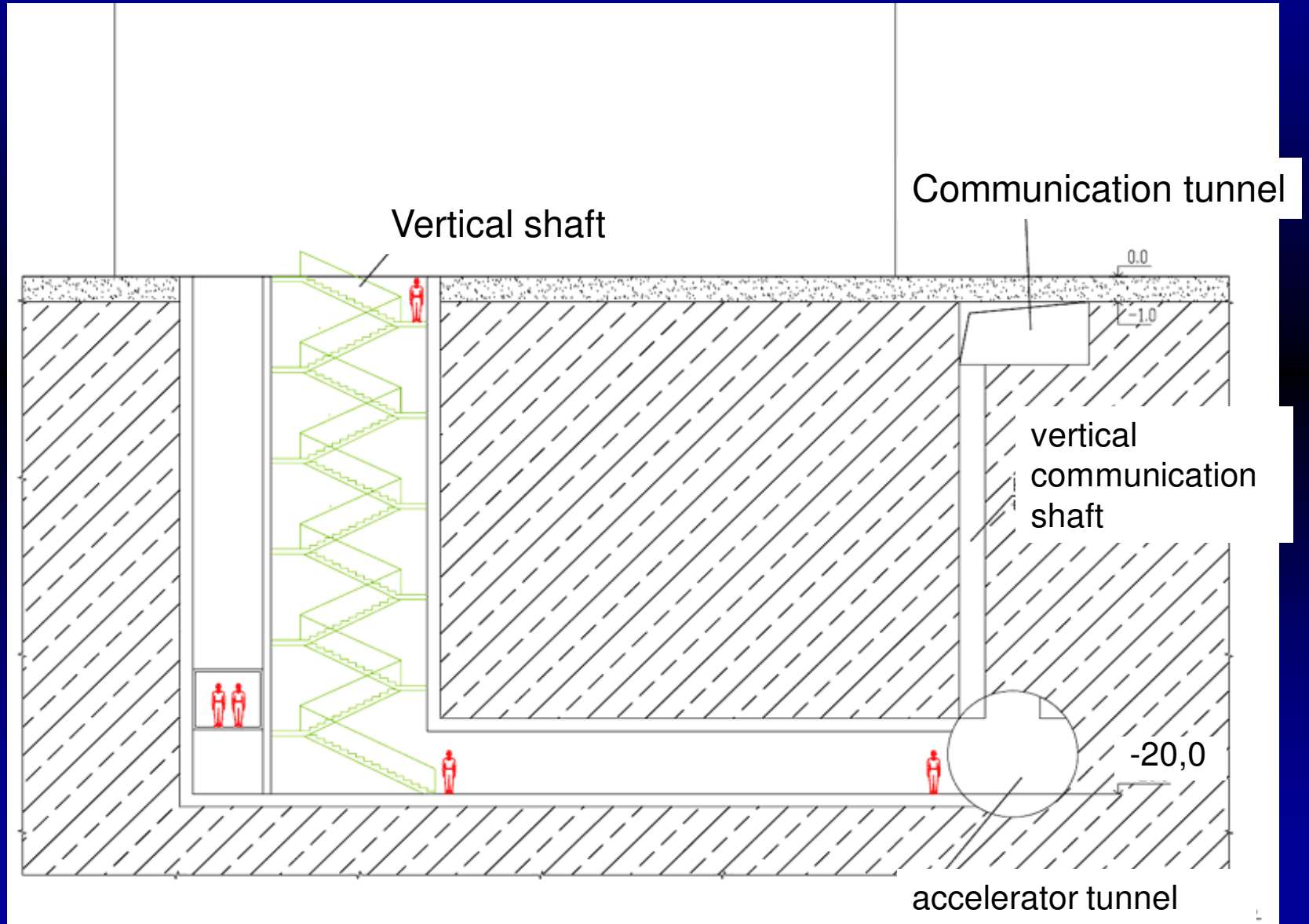


SLAC Workshop : A.Herve
 (CMS) and CERN team
 A.Gaddi, H.Gerwig study 2007

Proposed new cross section for ILC Interaction Region



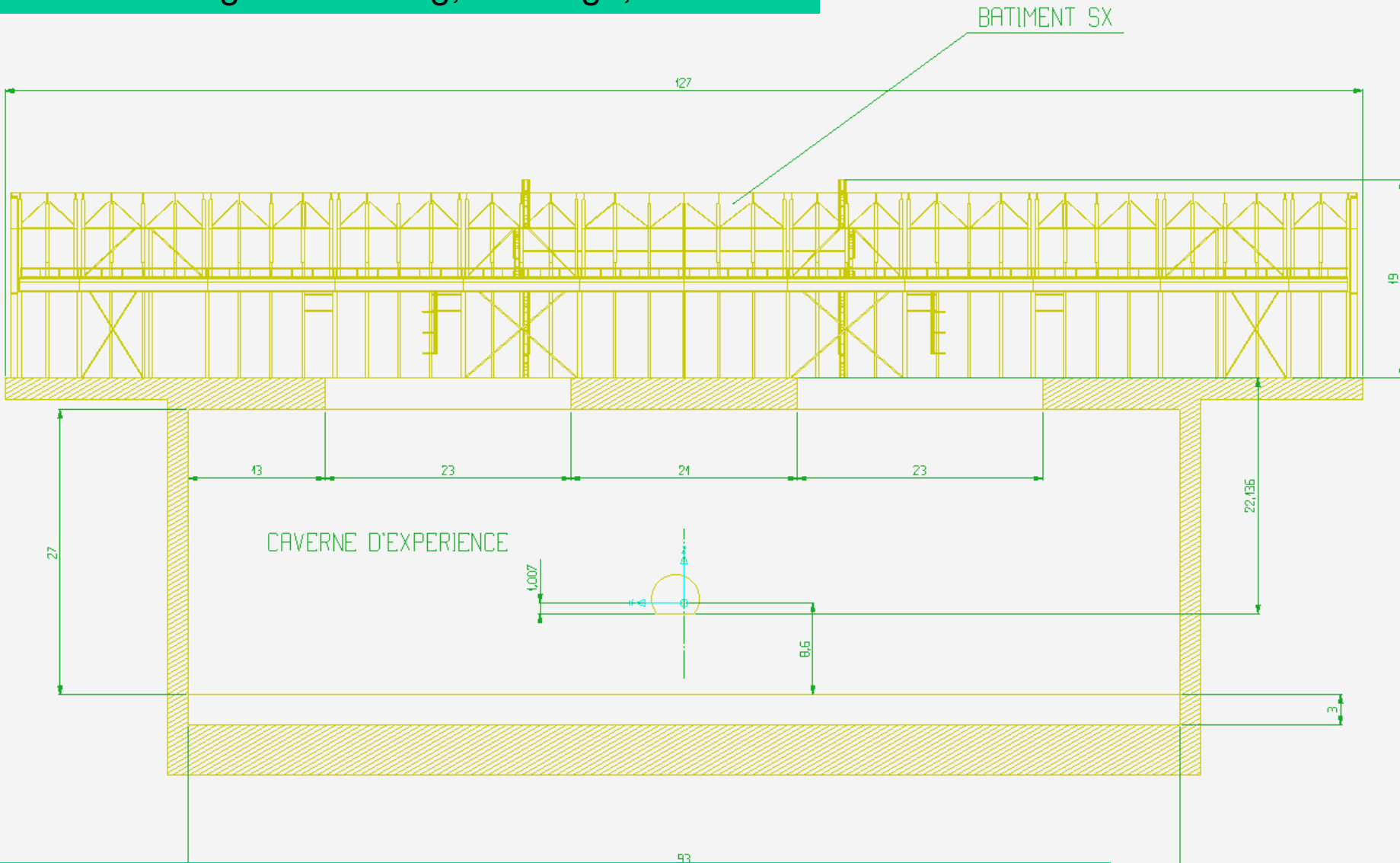
Proposed Dubna typical cross section Beam tunnel 20m below surface



Proposed Dubna Solution

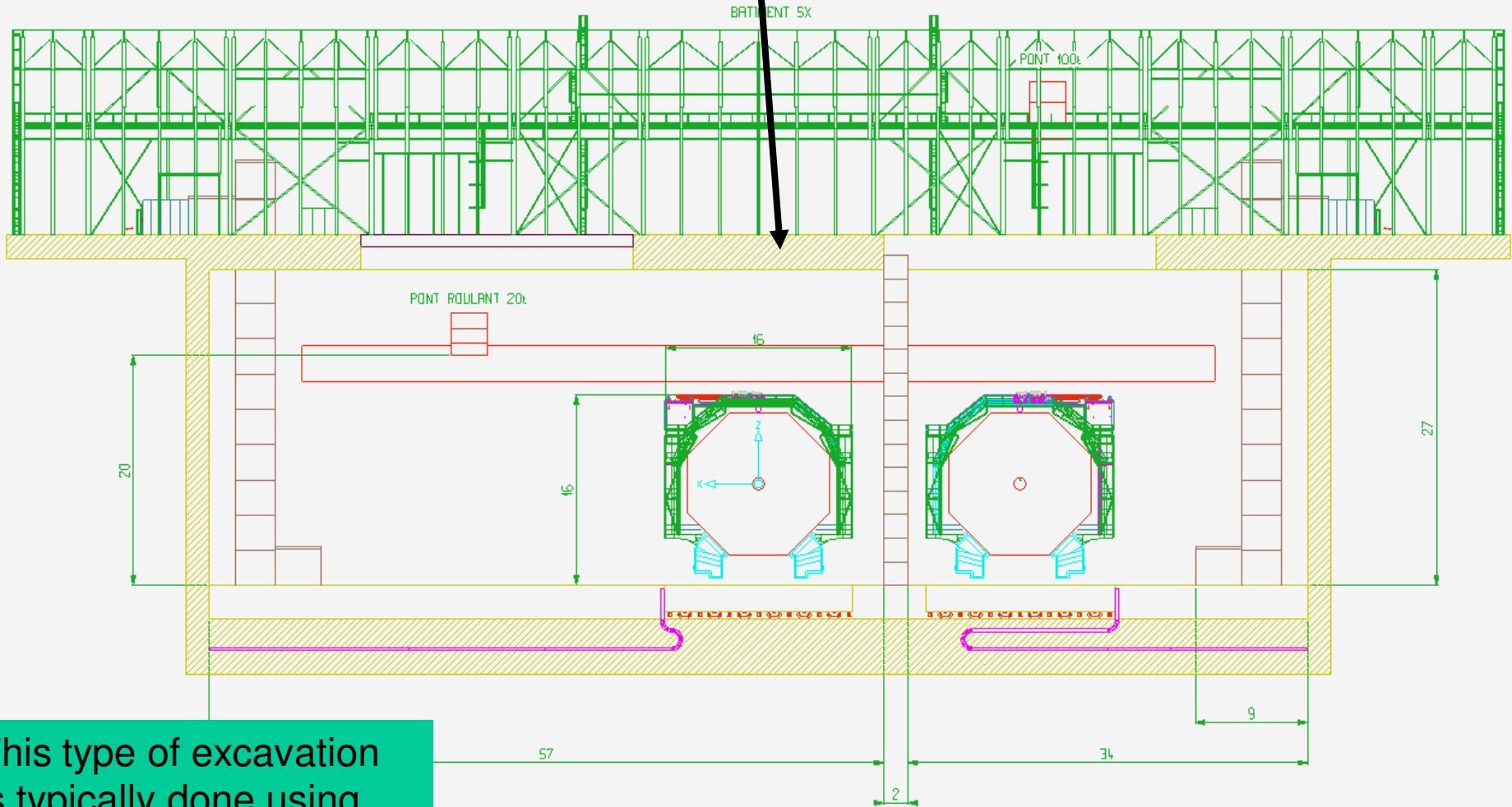


Surface building \approx 130m long, 20m high, 40m wide



Sub-surface experimental hall \approx 90m long, 30m deep, 35m wide

Permanent central propping needed
due to large span via concrete slab

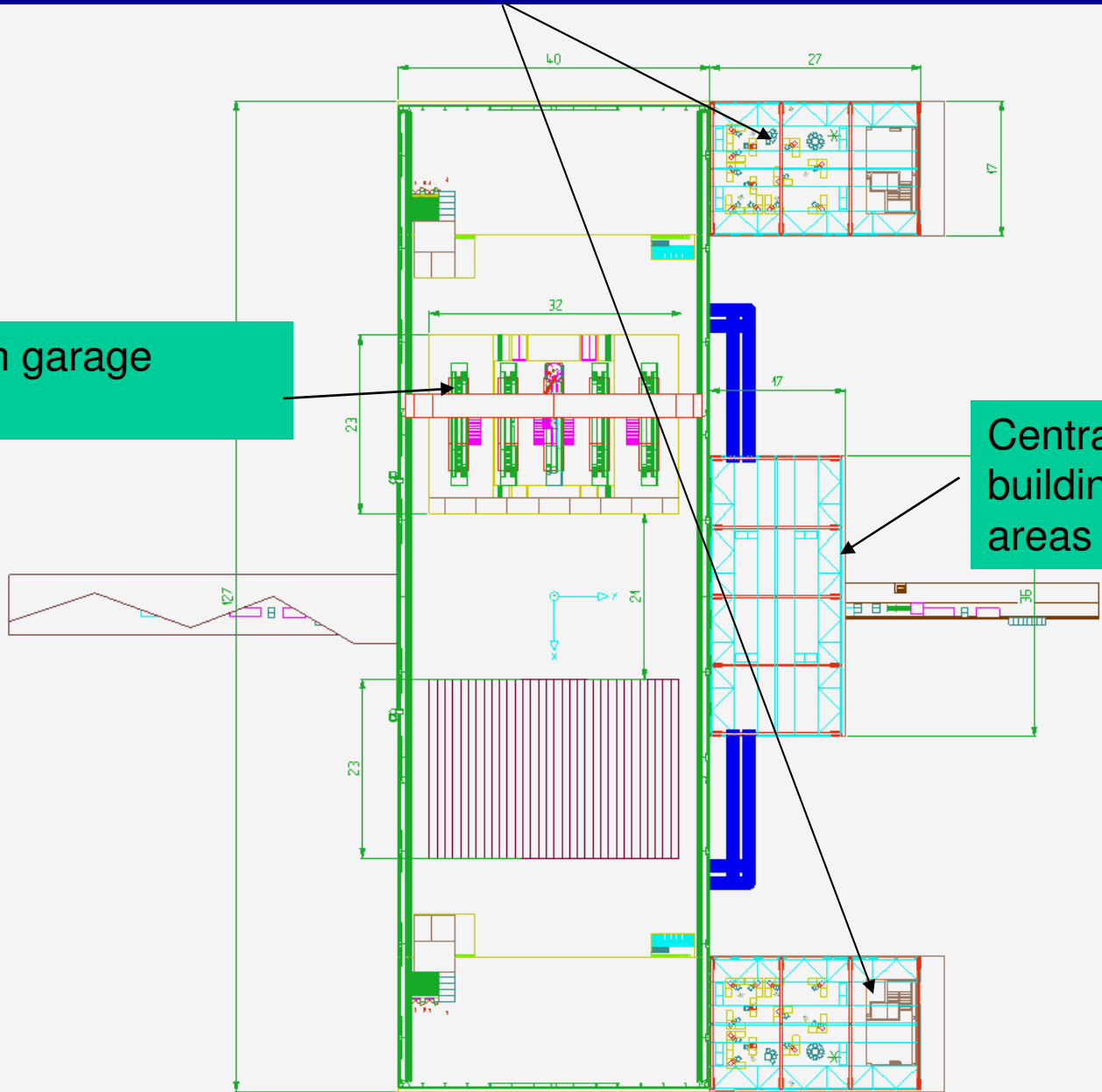


This type of excavation
is typically done using
'diaphragm wall'
technique

Control room for each detector

Detector in garage position

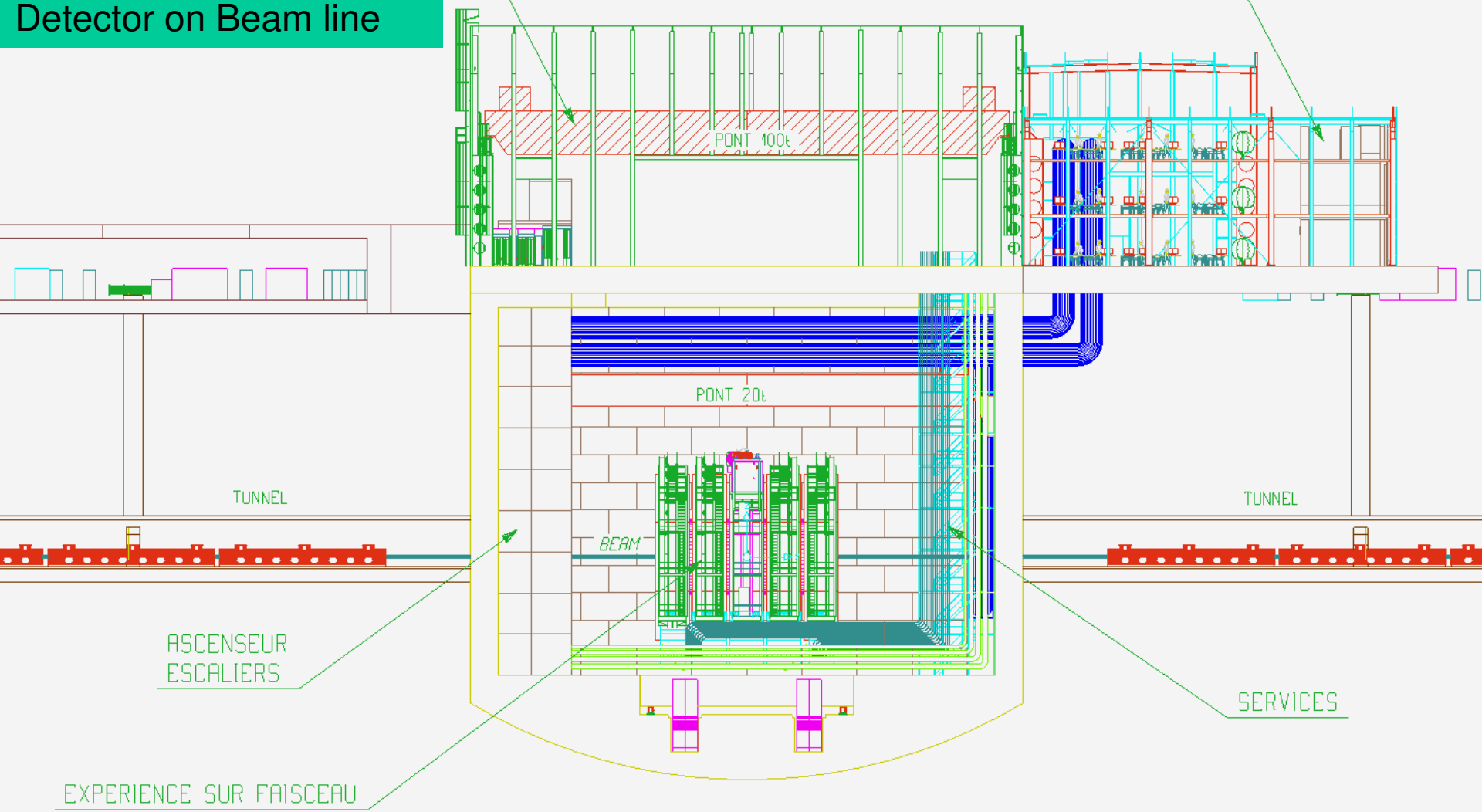
Central Ventilation building feeding both areas



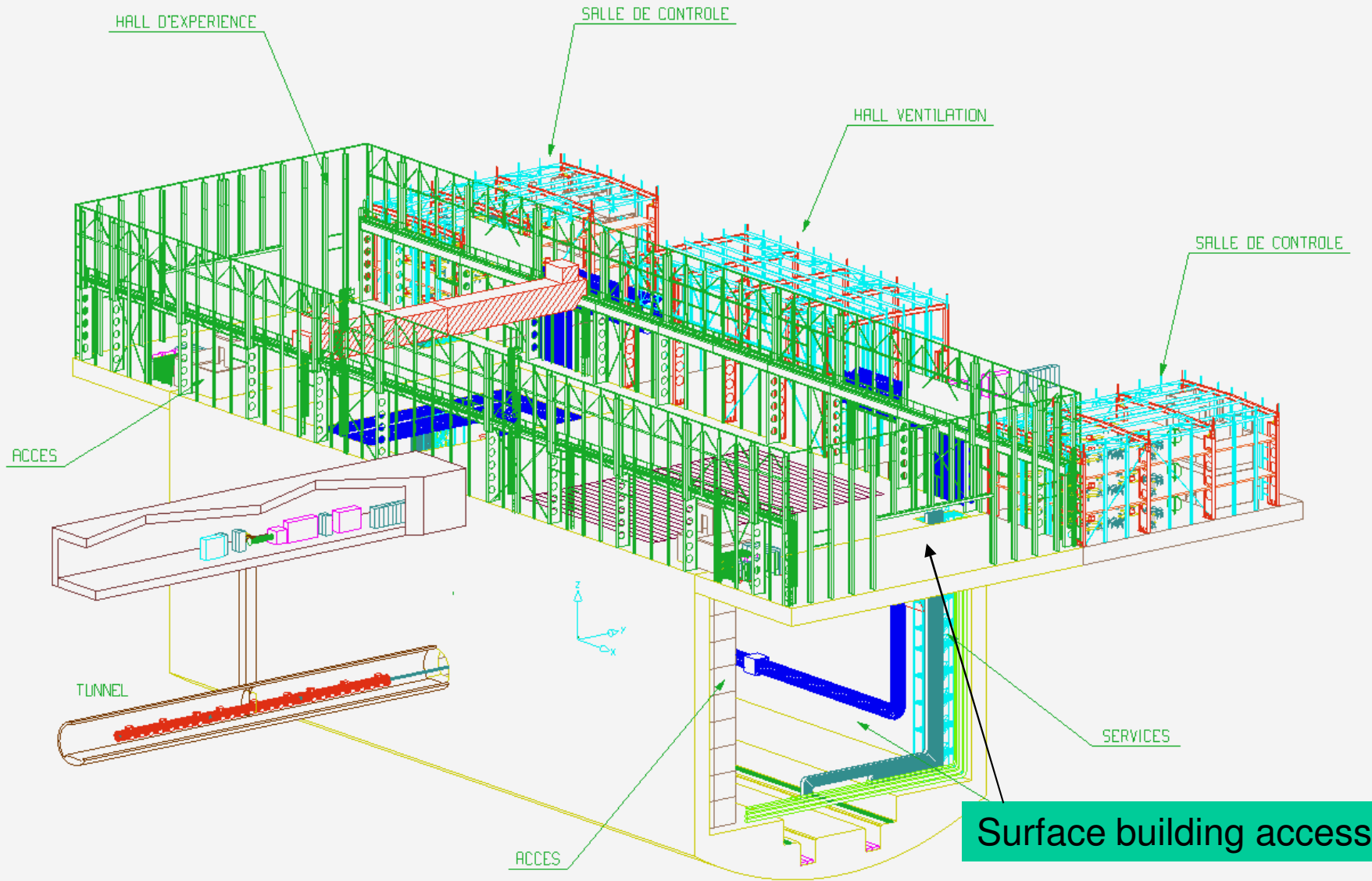
HALL D'EXPERIENCE

SALLE DE CONTROLE

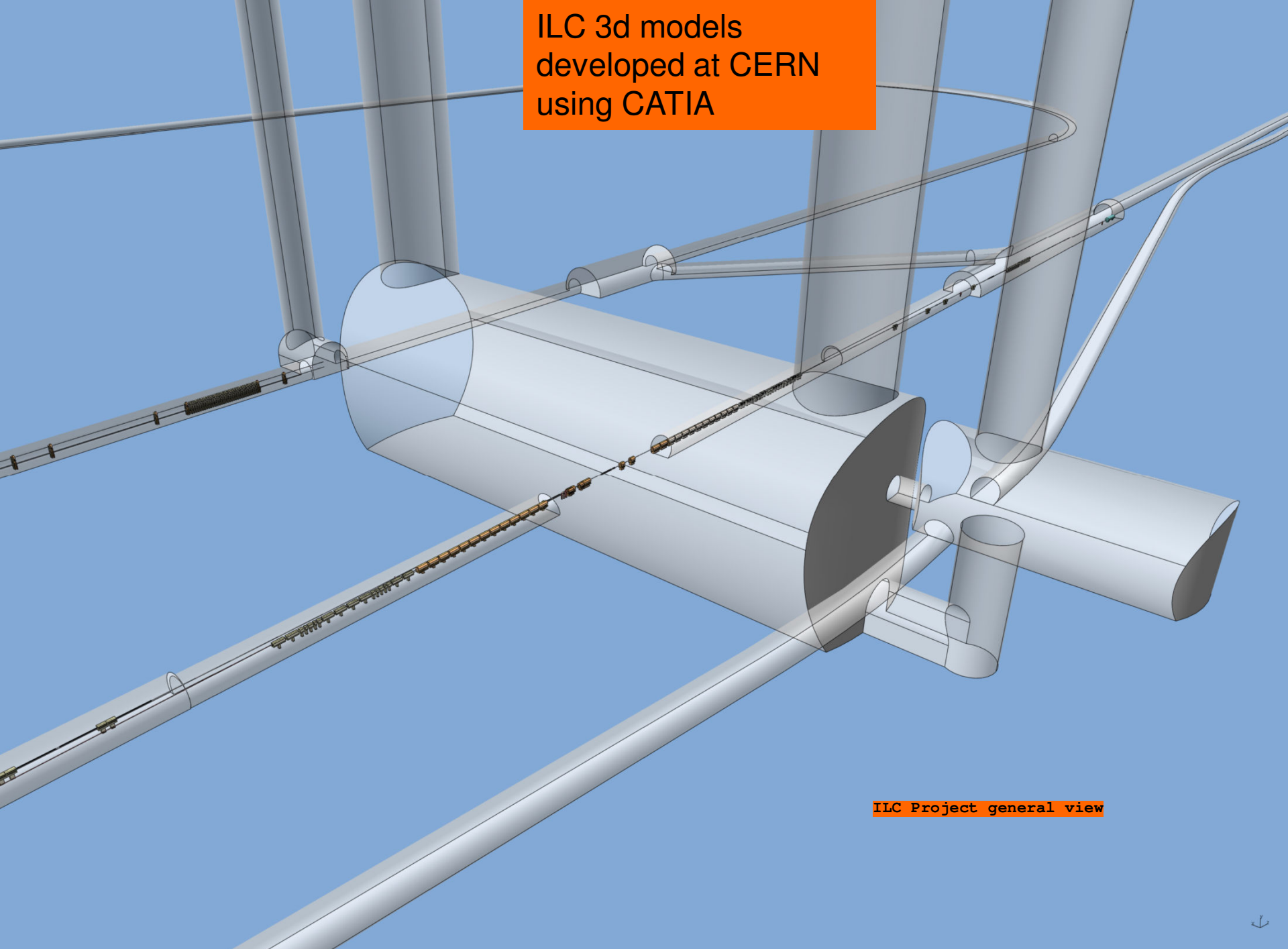
Detector on Beam line



EXPERIENCE SUR FAISCEAU

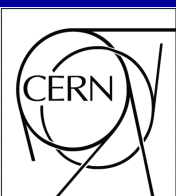


ILC 3d models
developed at CERN
using CATIA

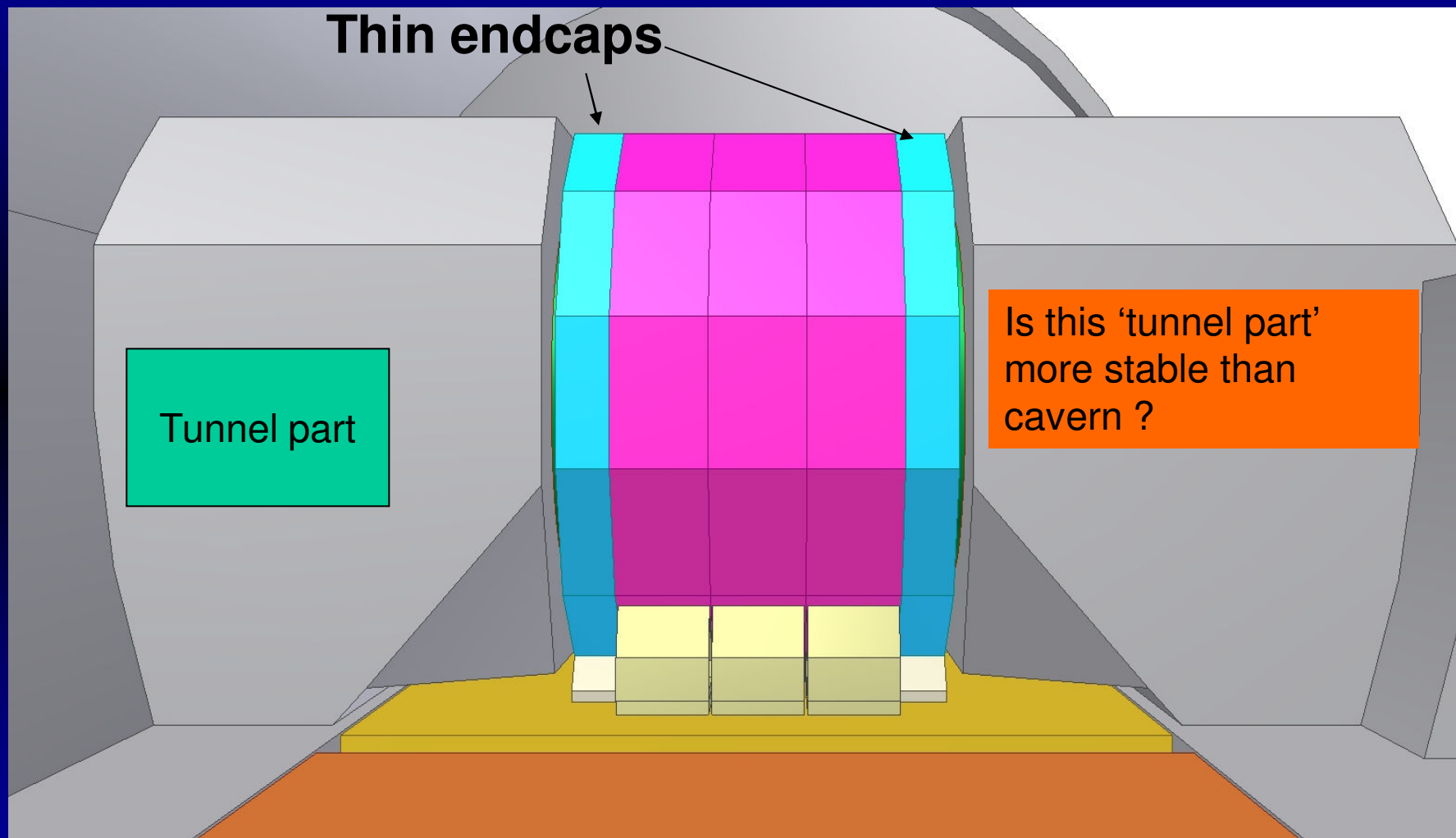


ILC Project general view





“Tunnel is at least ~ 10 times more stable than detector”
(A. Seryi, CLIC08)





2004



Stability of CMS
platforms could be
checked ?



CFS Questions

- Is 'CMS' installation concept adopted for both detectors ?
- Who are CFS points of contact BDS/MDI and Detectors ?
- Can CLIC and ILC experimental hall layouts be identical at this stage ?
- Costing required for CLIC CDR & ILC TDP for all technical infrastructure
- Dedicated CFS workshop in 2010 to gather required information ? (1/2 June KEK ?)