CMS: Basic Assembly Sequence

SURFACE : *proceeding independently of underground Civil Engineering*

*construct magnet yoke & cable
* prepare solenoid vac tanks
* assemble hadron calorimeters
* install muon chambers (barrel+ec) in yoke
* assemble coil & insert in vac tank
•insert HCAL inside coil

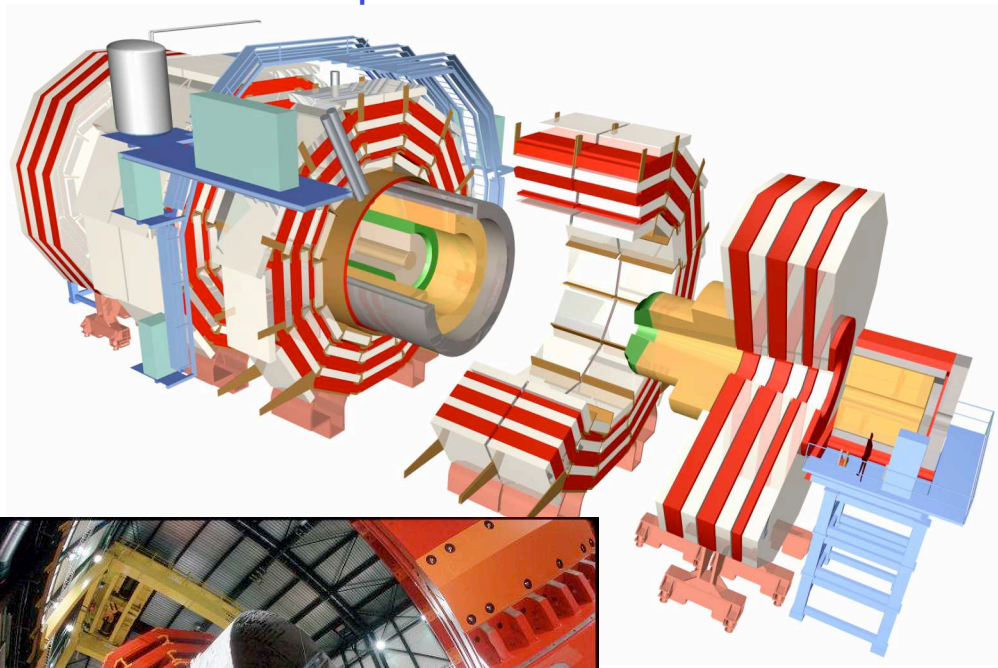
•TEST MAGNET (end-2005)

* insert part of ECAL barrel in HCAL
*separate elements and lower sequentially

UNDERGROUND:

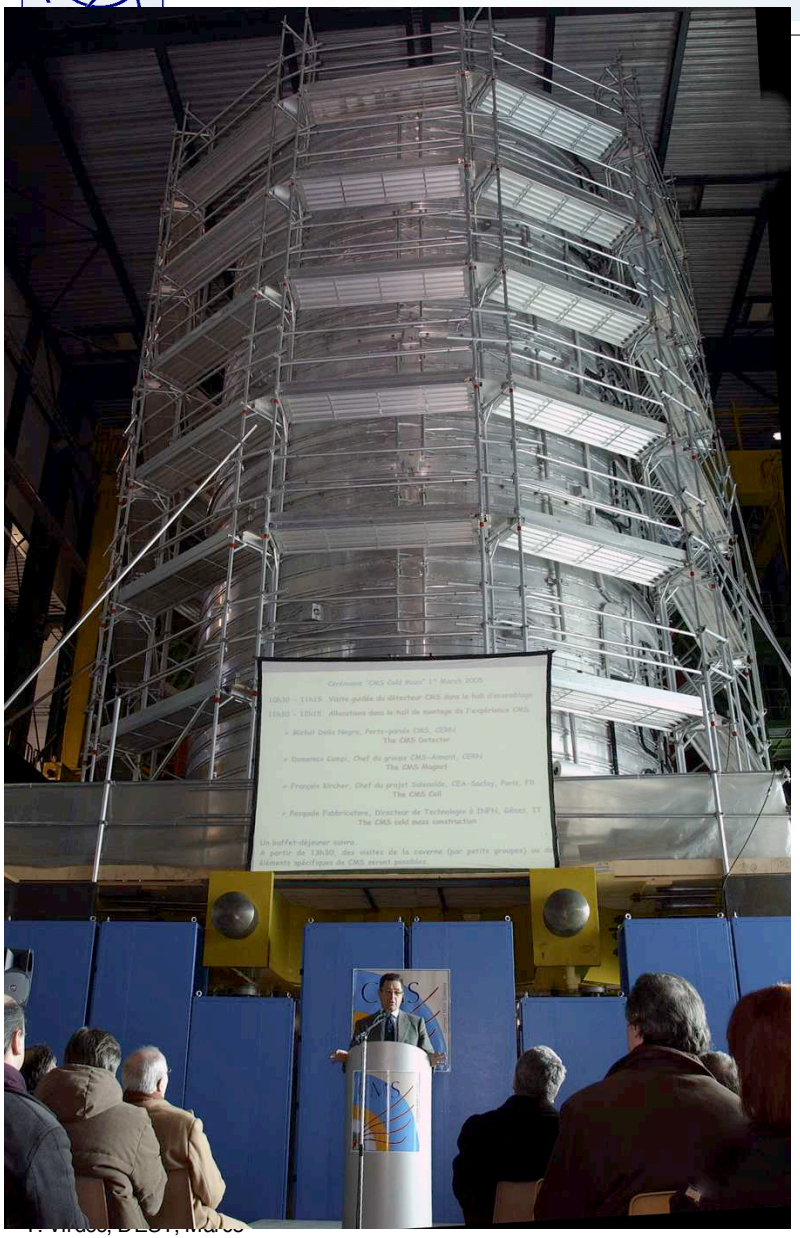
* install remainder of ECAL barrel & cable
* install Tracker & cable
* install beampipe
*close experiment & commission
•install ECAL endcaps (2007/2008)

modular structure : ease of surface pre-assembly
: rapid access for maintenance



CMS Yoke ready since 2003

CMS Magnet: Cold Mass Completed



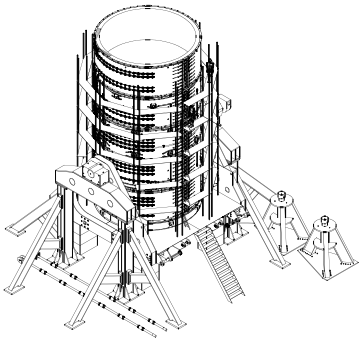
All major industrial contracts for the Magnet now completed.

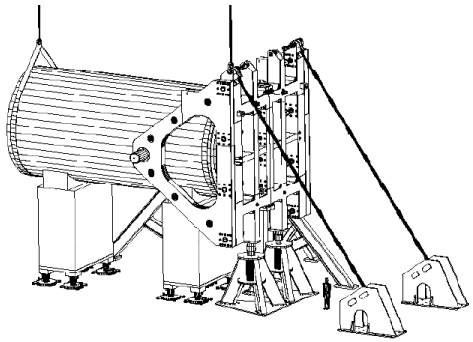
All 5 coil modules connected

Cold mass swivelling and insertion planned for June 2005

Start cool-down in October 2005. Complete electrical tests End-Dec 05

Q1_06 - Magnet Test and 'Cosmics Challenge'



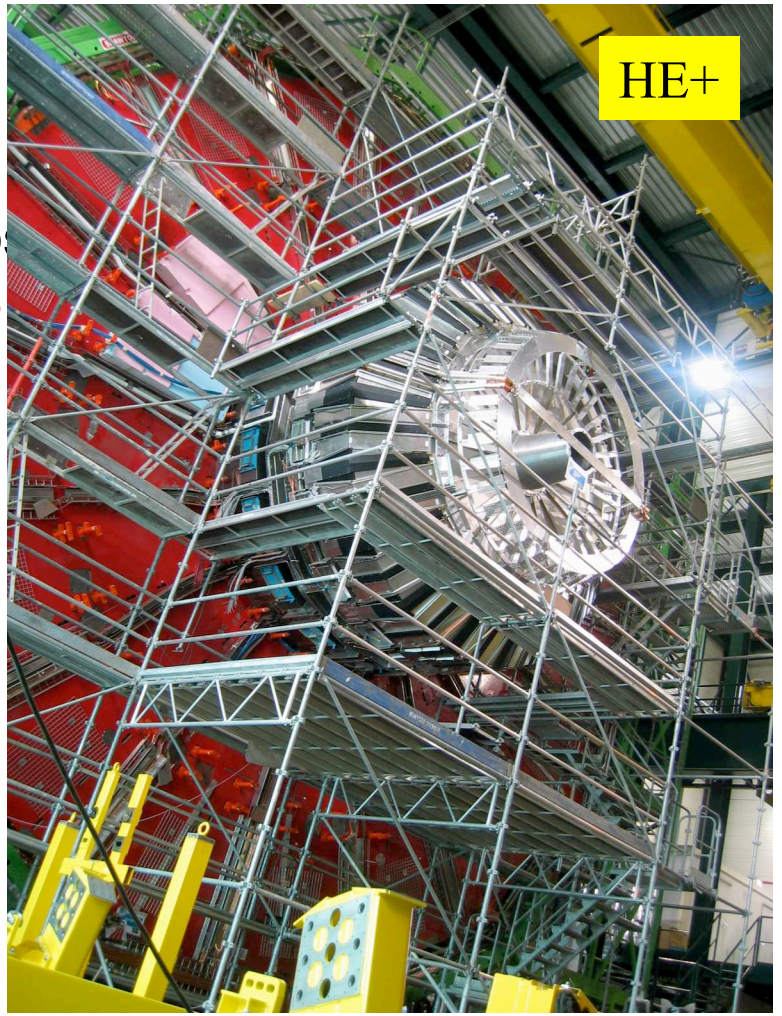


CMS: Hadron Calorimeter

Assembly of 2
half barrels
and two endcaps
completed in 03

(brass+ scint)

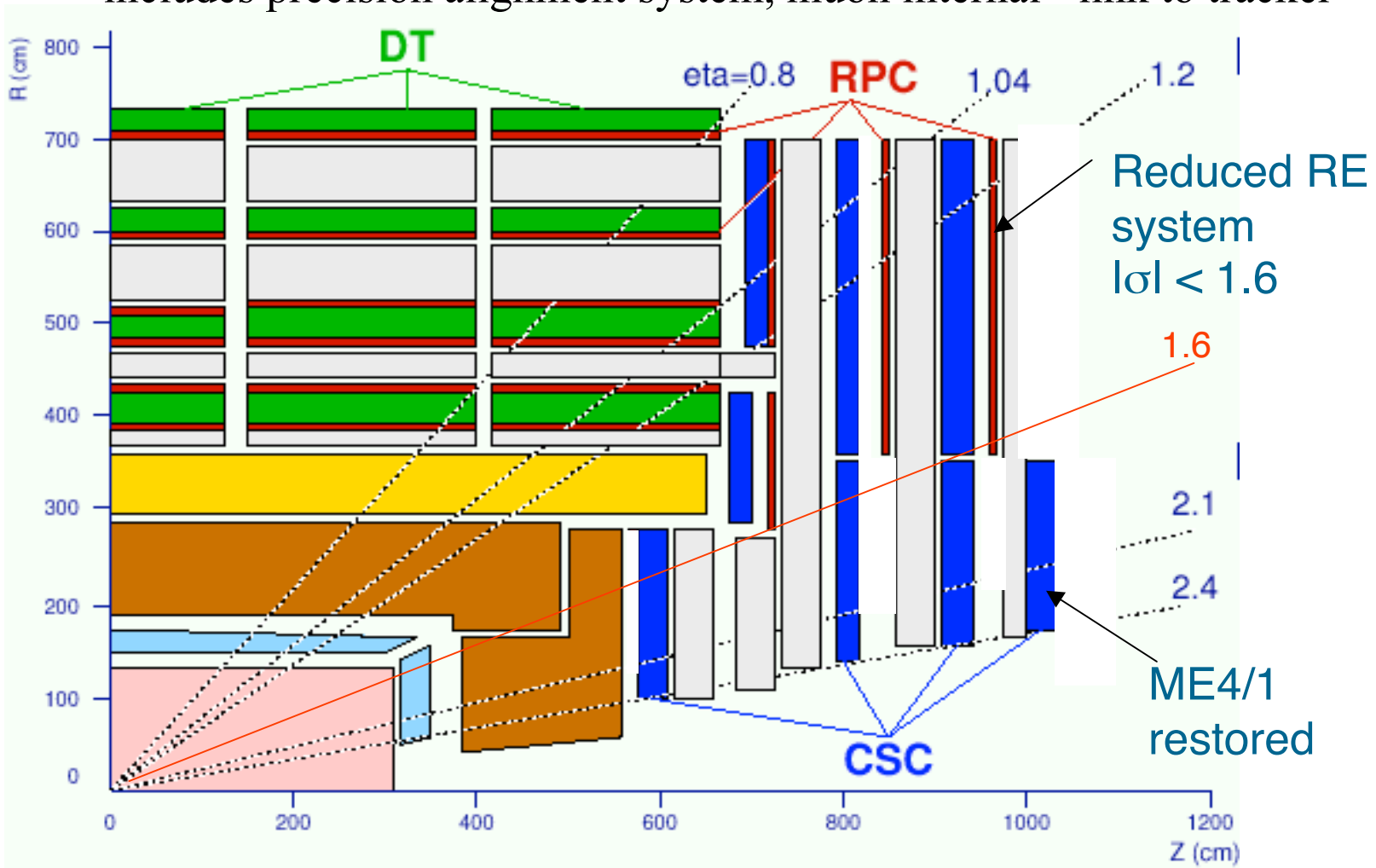
HF completed
In 2004
Fe-quartz fiber



Starting installation of readout boxes and burn-in.
Insertion in vacuum tank: Jul 2005.

Muon System

includes precision alignment system, muon internal +link to tracker



most (85%) will be installed and commissioned on the surface

CMS: Muon DT + RPC: YB+2

70% of chambers assembled
(need 250)

Yoke wheel YB+2:
34 chambers installed

2nd Installation campaign, for yoke wheel YB+1, to start in April