BMU Installation

CMS week,

Integration Meeting

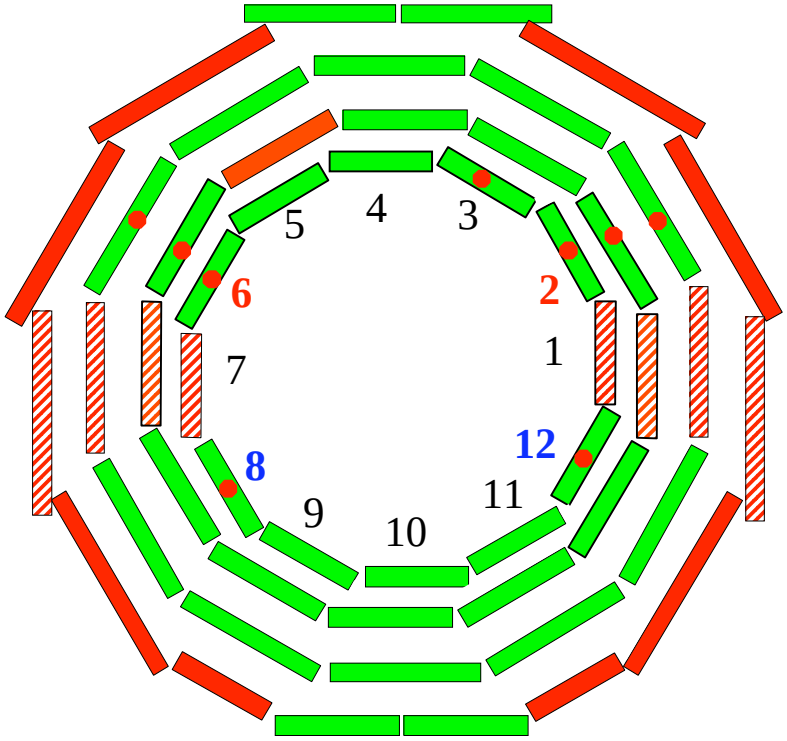
CERN March 16th 2005

A. Benvenuti

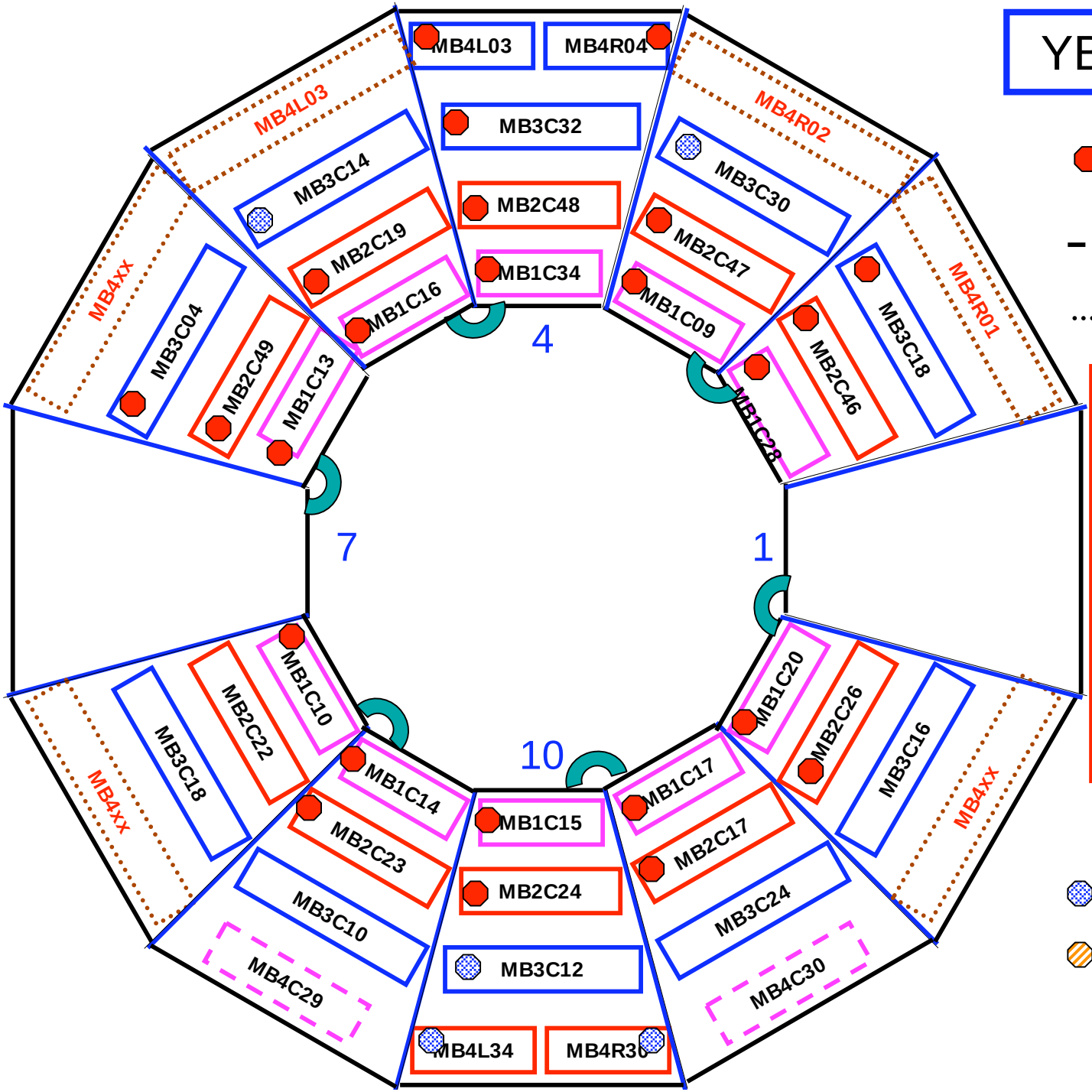
INFN Bologna

YB2+Status

CMS week
December 04



Mc Type	Installed	Missing	Total
MB1	5	5	10
MB2	2	8	10
MB3	2	8	10
MB4/4	0	2	2
MB4/10	0	2	2
Total	9	25	34



YB+2 Status

DT with Minicrate

Not Installed

Not Ready

Missing MB2 in S5 has been installed.

Damaged RPC on MB4/4 to be replaced.

Torino MB4 done

MininiCrate at ISR

MiniCrate Ready

March 29, 2005

YB+2 MiniCrate Installation Status

- 24 (out of 34) MC have been installed, ~5+9 have been tested, connectors completed on 9
- 5 MC(3MB3, 2MB4/10) arrived on March 13th at the ISR and will be installed this week. This completes the top part of YB+2
- Still missing 4MB3 and 1 MB2 MCs to be installed first week in April
- Functionality test will start again Thursday for one week. Soldering PADC connectors, connection to the cooling manifold et cetera will proceed in parallel as much as possible
- Test of the cooling circuit with gas and water is the last item before we can start chamber commissioning (prerequisite to cabling)
- Still to do: tide up cabling, complete LV and HV connections, adjust chamber position (z), mount flex rails, radial trays

YB+1 Installation Schedule (Revised)

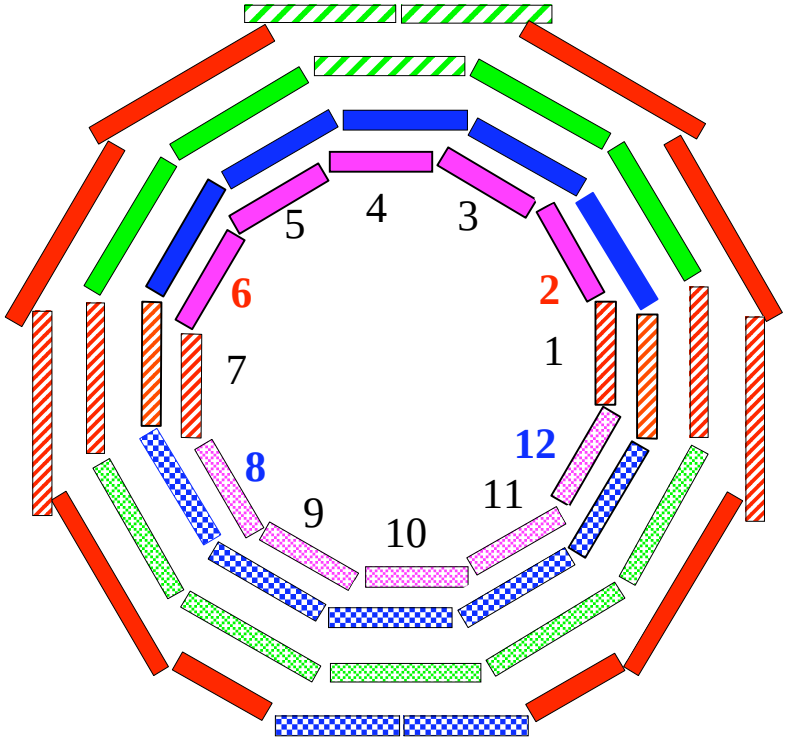
- The first phase of YB+1 installation comprises 34 chambers: 2 feet chambers can be installed only during the cabling operation, 6 MB4 Torino chambers are late and are installed separately

- The preferred installation sequence (Massimo):

5MB2 Bottom, 2MB4/10, 5MB1Top,4MB3,5MB2, 5MB3 Bottom, 5MB1 and the MB3, 2MB4/4 chimney

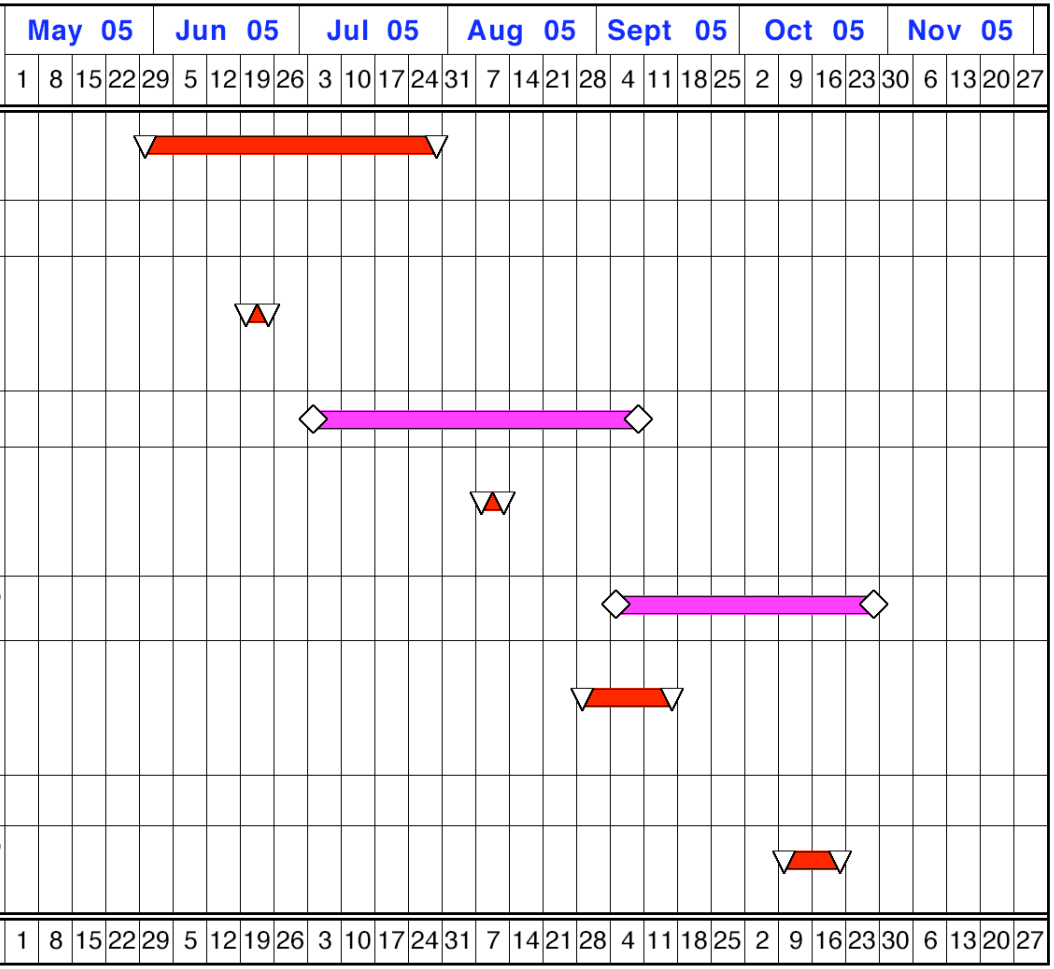
Minimizes the cradle configuration operations, danger to the bottom MB1s and takes into account the delay in the MB3 chimney production

- The planned installation period: 11/04 to 06/05 must be postponed to the end of May to take into account the MC production rate (12/month) and that at least 12 chambers must be ready before we start installation



Revised Installation and Cabling Schedule

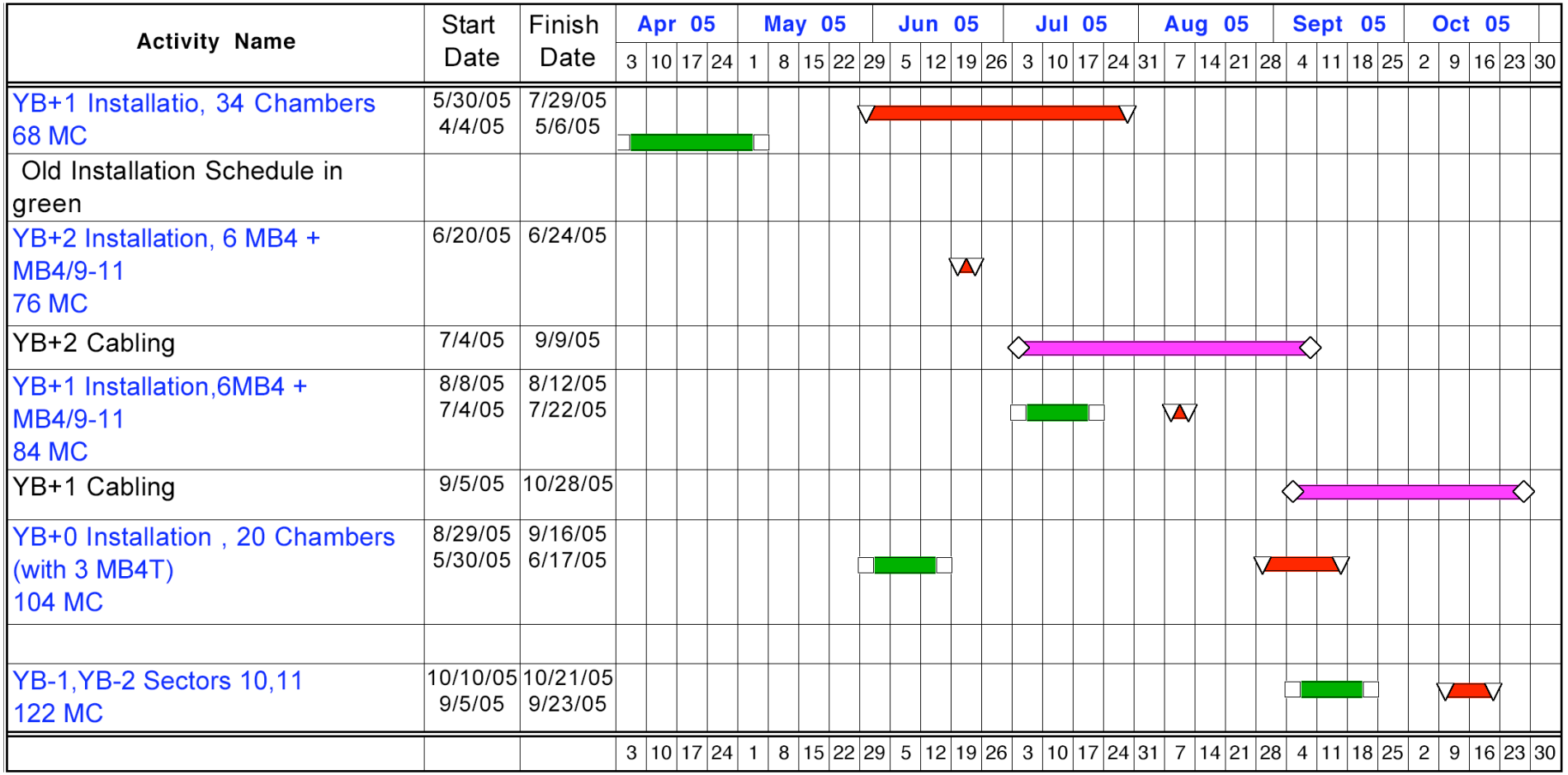
Activity Name	Start Date	Finish Date
YB+1 Installatio, 34 Chambers 68 MC	5/30/05	7/29/05
YB+2 Installation, 6 MB4 + MB4/9-11 76 MC Installed from minus side	6/20/05	6/24/05
YB+2 Cabling	7/4/05	9/9/05
YB+1 Installation,6MB4 + MB4/9-11 84 MC	8/8/05	8/12/05
YB+1 Cabling	9/5/05	10/28/05
YB+0 Installation , 20 Chambers (with 3 MB4T) 104 MC Move YB+1?	8/29/05	9/16/05
YB-1,YB-2 Sectors 10,11 122 MC	10/10/05	10/21/05



12 MC/month production rate up to end of June then 16 MC/month

Summer Vacations NOT considered

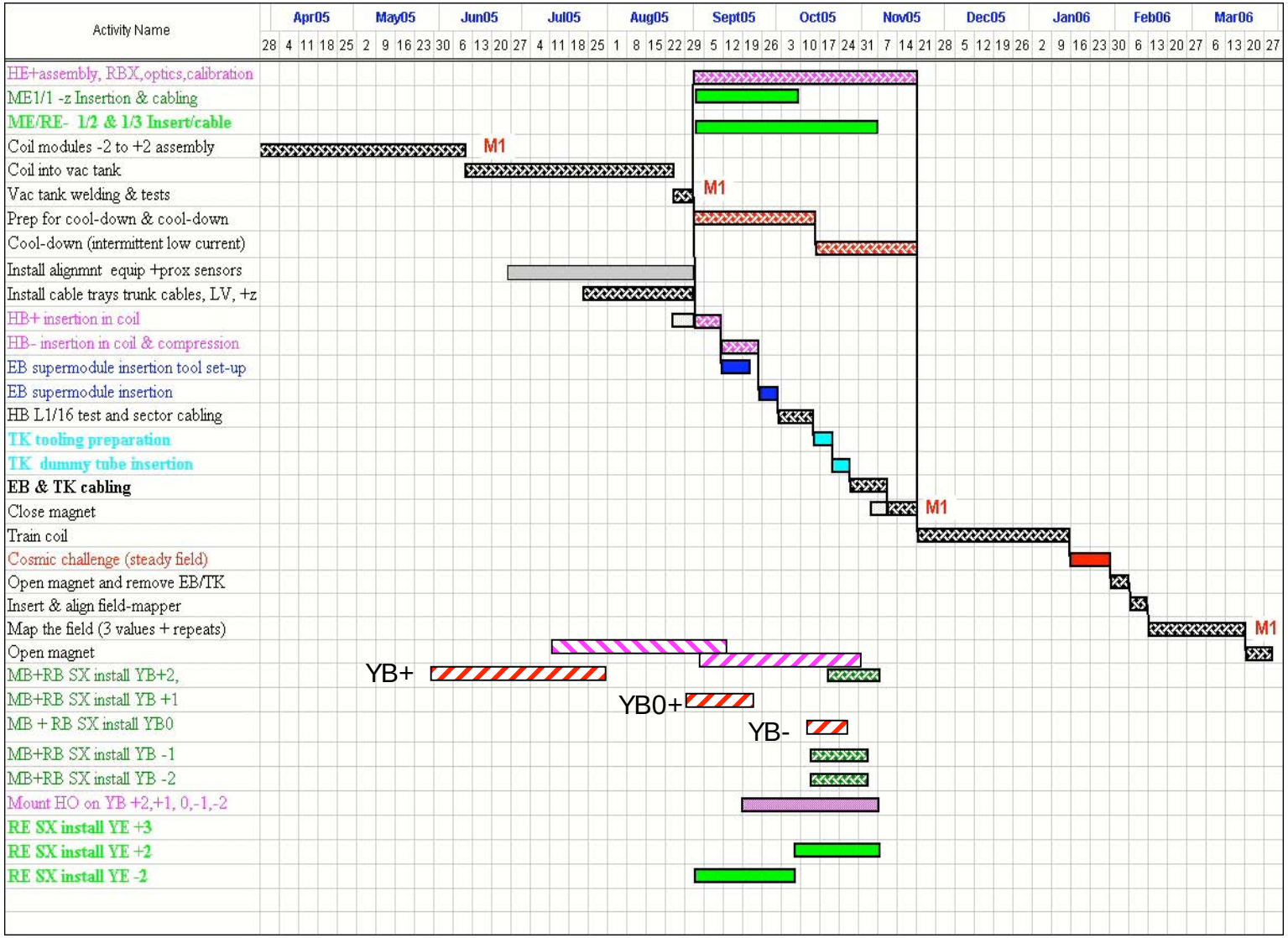
Possible conflicts with Magnet Test/Cosmic Challenge to be worked out



Shift in installation schedule given by MC availability

Cabling windows remain unchanged since they are driven by MB4 construction schedule and cables readiness.

Magnet test: v34.1 schedule draft 2



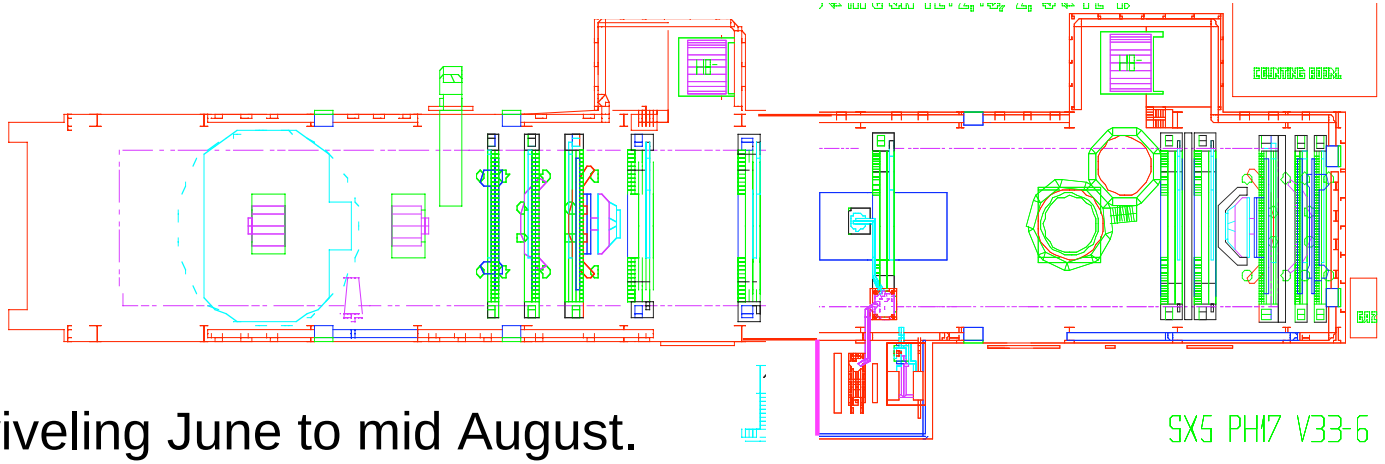
Conflicts with YB+0 installation, YB+1 cabling and YB- installation.

Access to YB- wheels needed for ancillary work: MB1 supports, holes.. ~2 weeks/wheel

SX5 configuration up to swiveling

(Austin CTF 11/03/05)

+z end -z end



Magnet swiveling June to mid August.

allows for parallel work on coil, HB+, HB-,YE-1, YE+1, +end YB (muon barrel)
in this way we hope to recover the recently accumulated delay

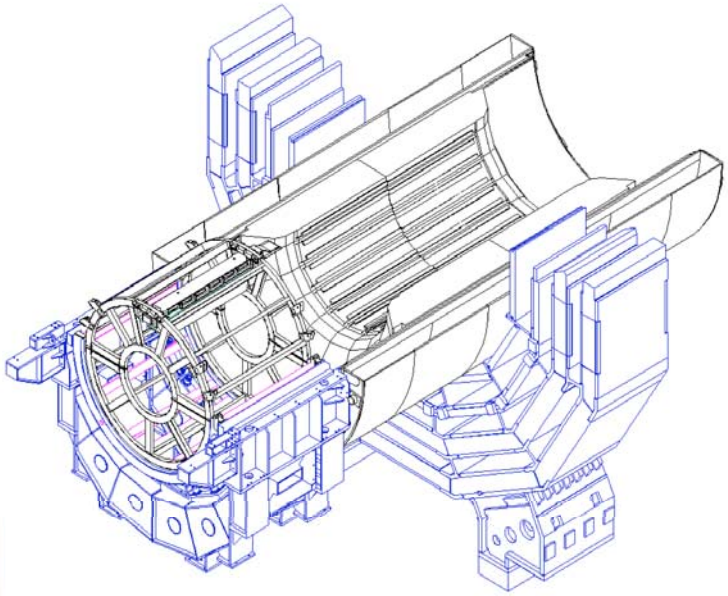
ME/HE slice test cables can run across +z alcove, but not –z alcove

HB+ insertion requires rearranging YE+, YB+

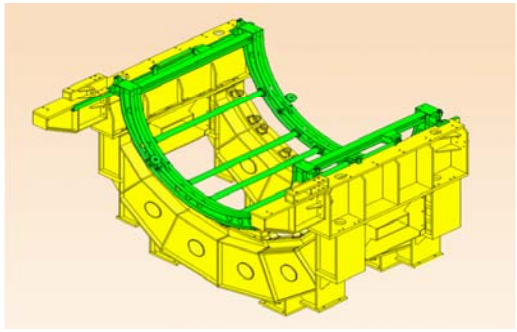
ECAL in magnet test

Install SMs in 6 o'clock position: 1 or 2?

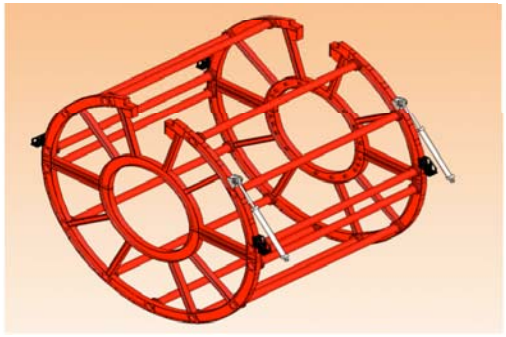
How is the Tracker then installed?



HB cradle with cage cradle



Cage (both halves)



Delivery of insertion tool May 2005

Need HF-raisers and HB cradle

Installation/cabling Scheduling Conflicts

Cosmic Challenge/Magnet Test preparations interfere with BMU installation and cabling:

- moving HB+ from Alcove requires rearranging (closing) YB, YE
- insertion of ECAL modules requires support structure in front of YB0 this interferes with chamber installation and cabling
- Tracker insertion requires support structures at both ends YB0. It interferes with YB- S10/11 installation
- Access to YB- is needed for ancillary work: mounting MB1 supports, support plates drilling holes et cetera. An appropriate window must be established in the schedule
- We should include in the schedule the time required to set-up and cable the MABs for sectors 10/11 and photogrammetry if needed