

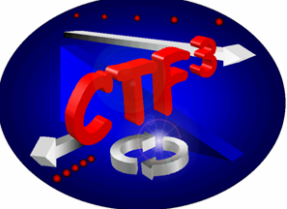


# Planning & conclusion

L. Rinolfi

on behalf of CTF3 team

- A major activity: 30 GHz test stand
- A major installation: the Delay Loop
- Operation scenario in 2005



# CTF3 General layout

Areas with foreseen activities in 2005

Injector

Drive Beam Linac  
Fully loaded  
acceleration

Delay Loop

Combiner Ring

CTF 2

10 m

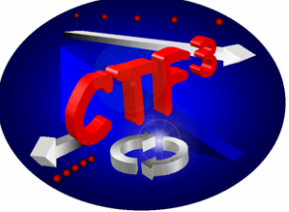
TL1

TL2

30 GHz Test Stand  
and  
RF Photo-injector  
in CTF2

CLEX (CLIC Experimental Area)  
Two Beam Test Stand  
Probe Beam

Areas with foreseen activities after 2005



# CTF3 Installations in 2005

## Installed so far:

Thermionic injector 3 GHz

(LAL/SLAC/CERN)

Magnetic chicane

Linac (8 structures)

30 GHz PETS

CTF 2

10 m

Sub-harmonic  
bunching system  
1.5 GHz  
(SLAC / CERN)

RF Photo-injector  
PHIN  
(LAL / RAL / CERN)

Bunch lengthening chicane

(INFN Frascati)

BLM (NW University)

6 new accelerating structures

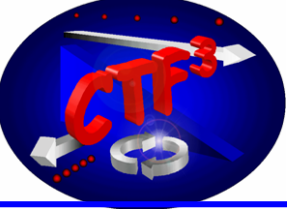
Improvement of  
30 GHz test stand

## To be installed:

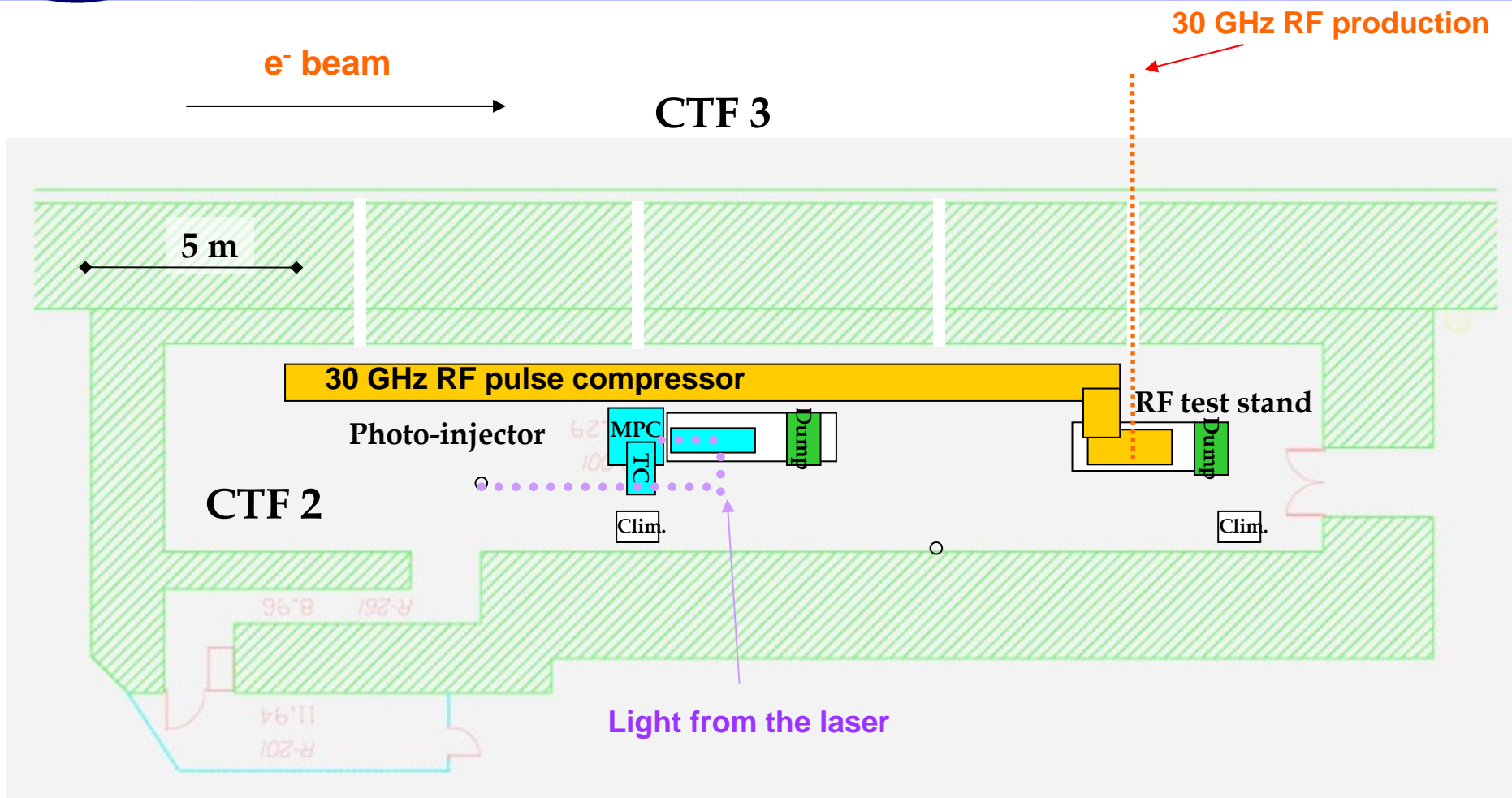
Delay Loop (INFN Frascati)

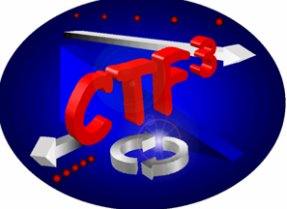
Phase monitor (Uppsala)

End of Drive Beam Linac (INFN Frascati)

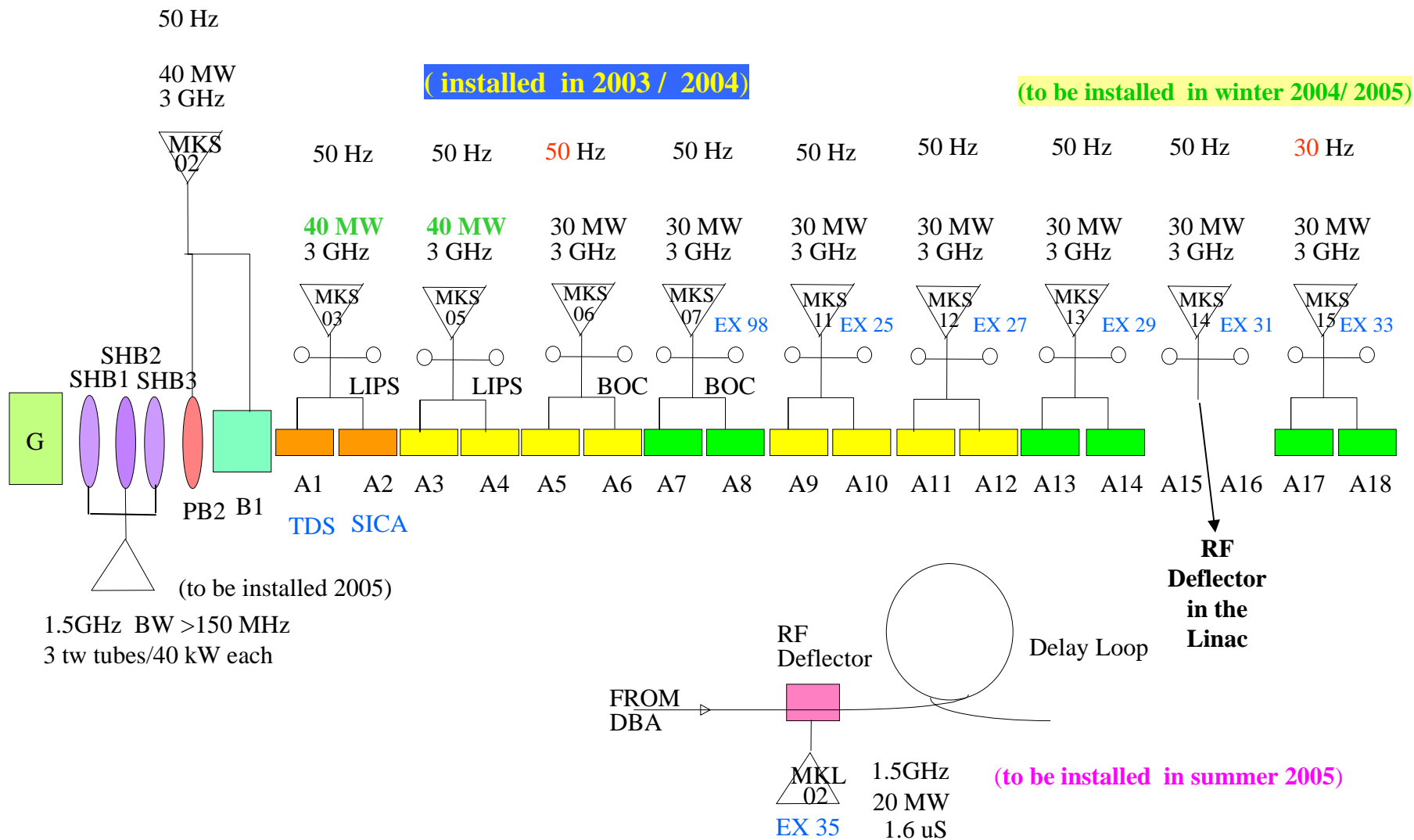


# CTF2 layout up to the end of 2006

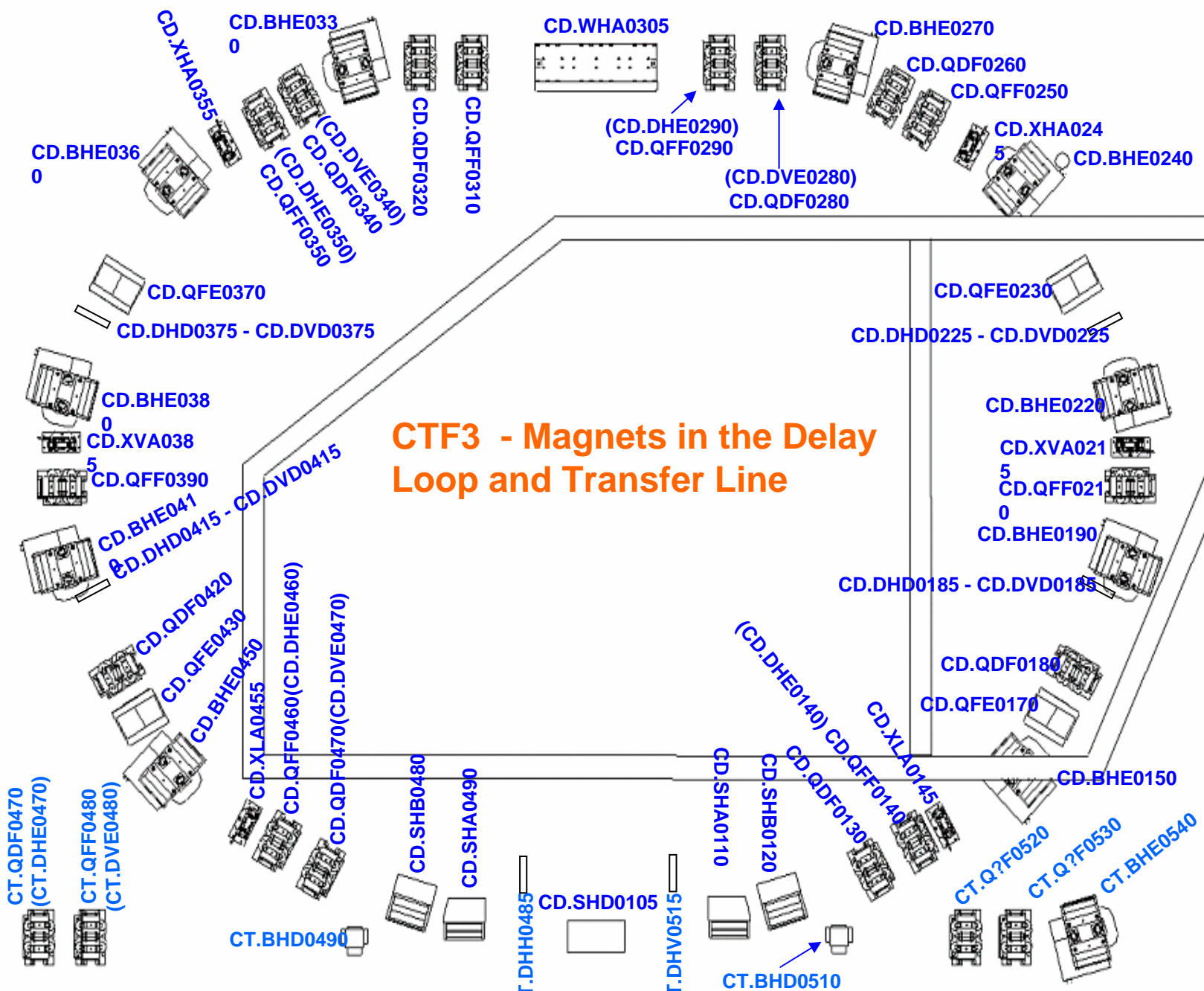




# CTF3 RF power plant

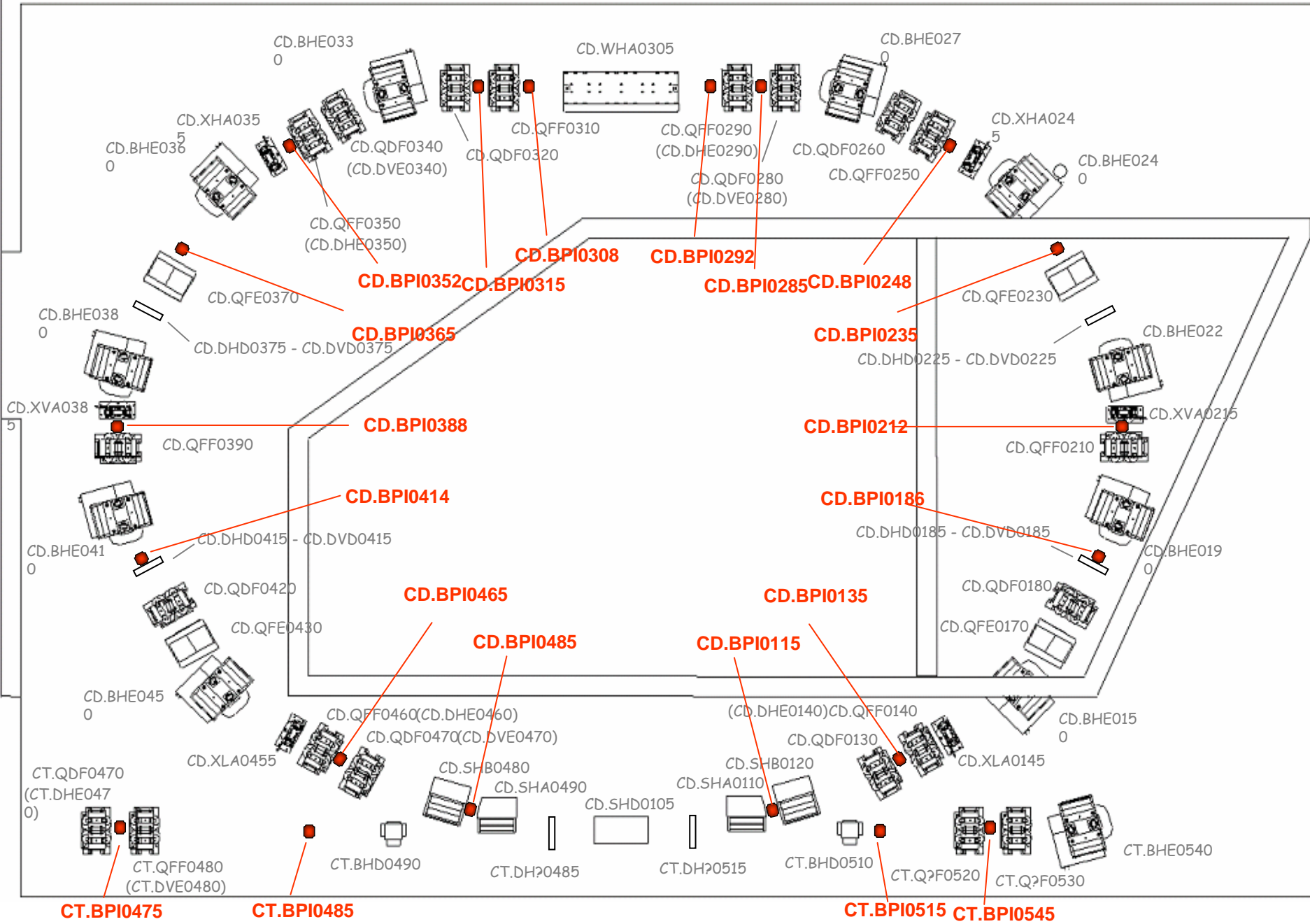


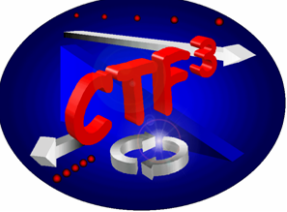
# CTF3 - Magnets in the Delay Loop and Transfer Line





# CTF3 - Beam Position Monitors in the Delay Loop and Transfer Line

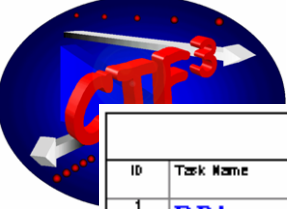




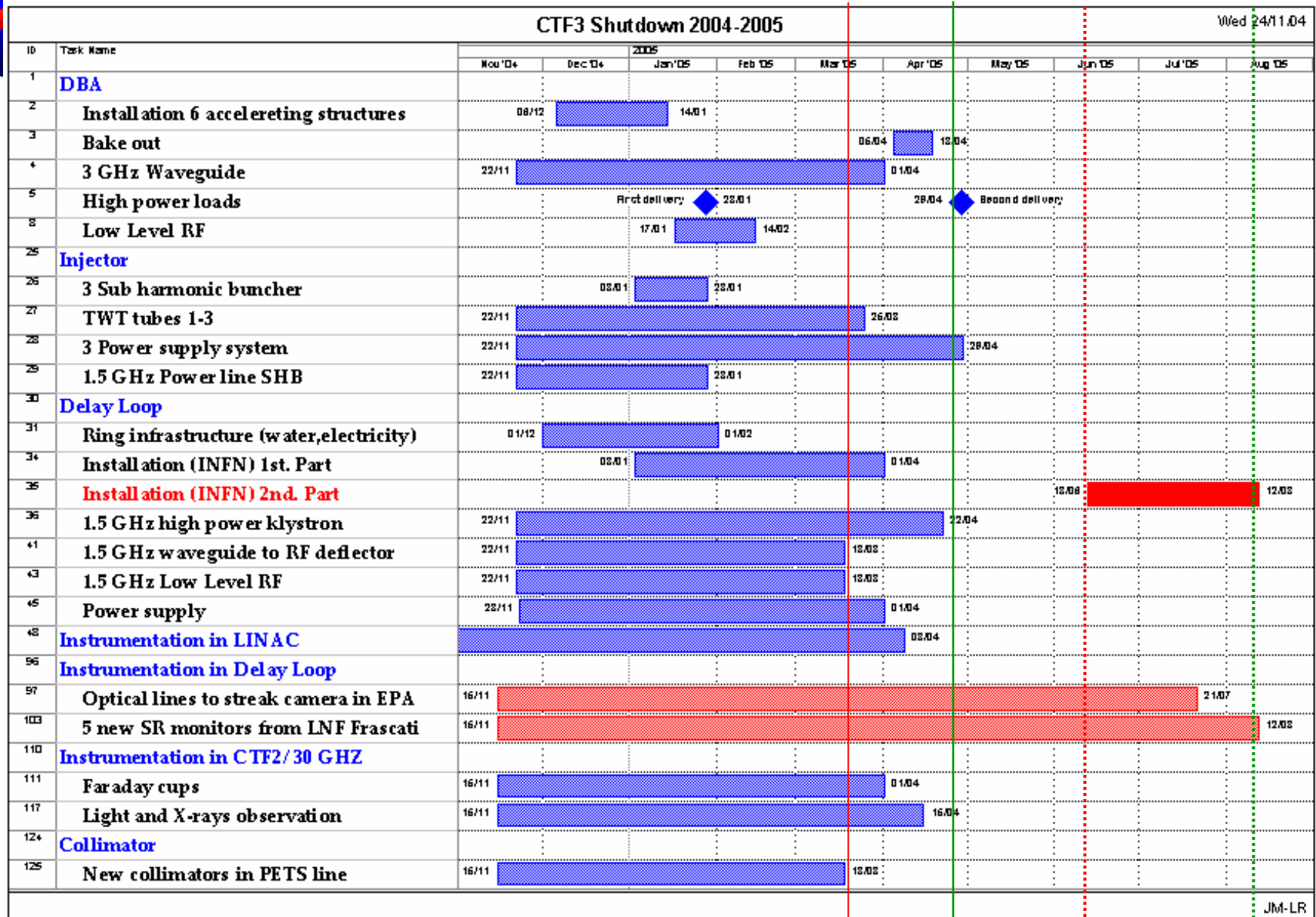
# Constraints for the planning 2005

- **Beam used for the 30 GHz RF production (PETS line)**
  - ❖ Present installation is already OK but new components installed in CTF2
  - ❖ Check RF structure alignment and possible damage.
  
- **Beam used for the commissioning of the completed Drive Linac and Delay Loop**
  - ❖ Installation of the sub-harmonic bunchers but not necessary to be powered for the 30GHz in the PETS line and for the commissioning of the Linac.
  - ❖ Installation of the Transfer line between the end of Linac and the Delay Loop.
  - ❖ Installation of the Delay Loop components as much as possible in a first period of shut-down; then complete installation of the Delay Loop in a second period.
  - ❖ Constraints of space and installation order of components.

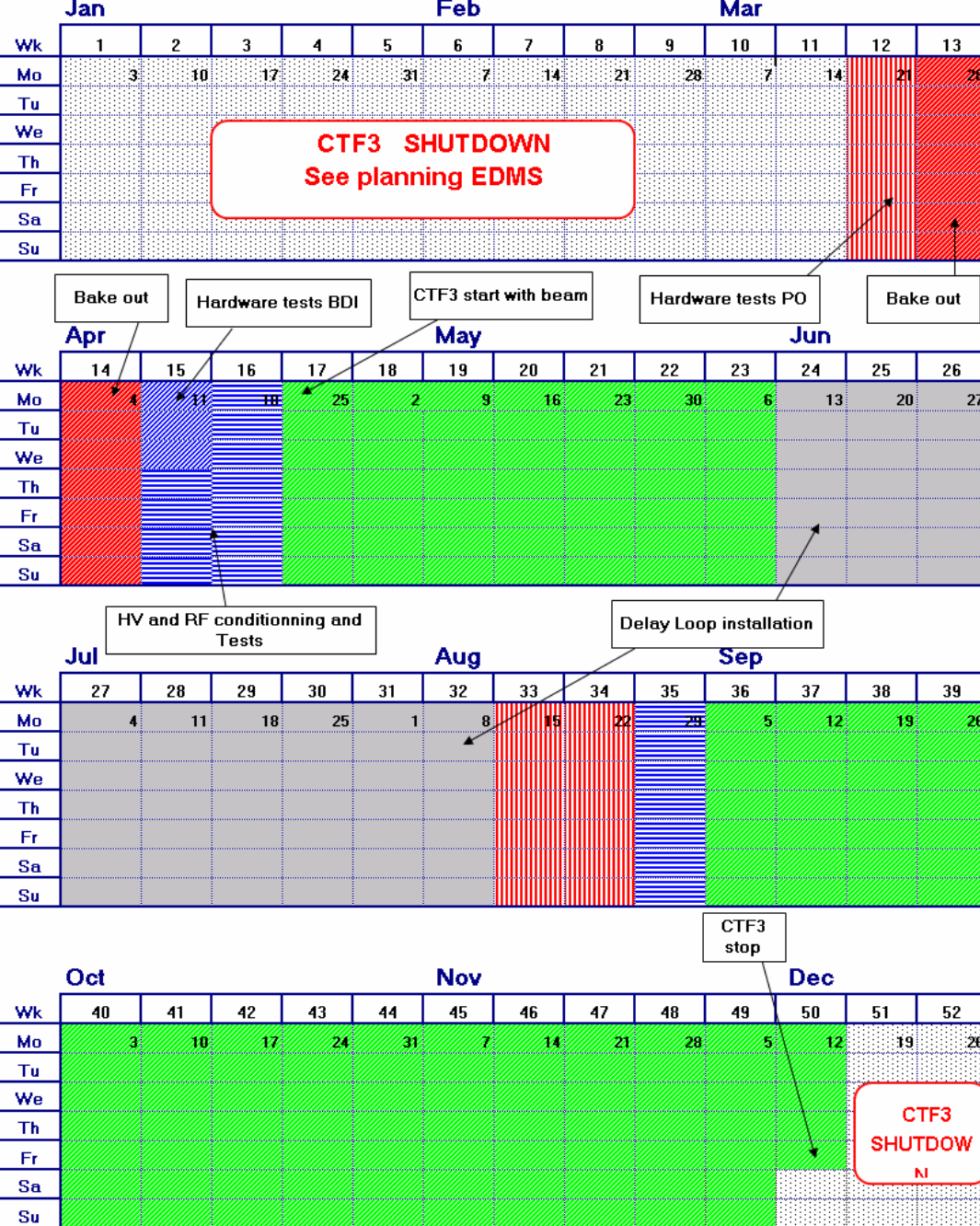




# Planning of major activities for next run in 2005



# CTF3 Schedule 2005



## First run: April to June 2005:

➤ Mainly 30 GHz RF Production and Tests over 7 weeks.

## Second run: September to December 2005:

➤ Commissioning of the Delay Loop and 30 GHz RF Production over 15 weeks.