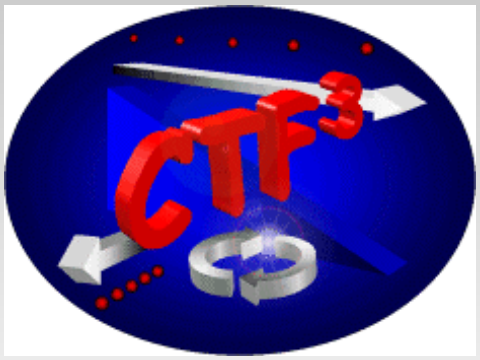
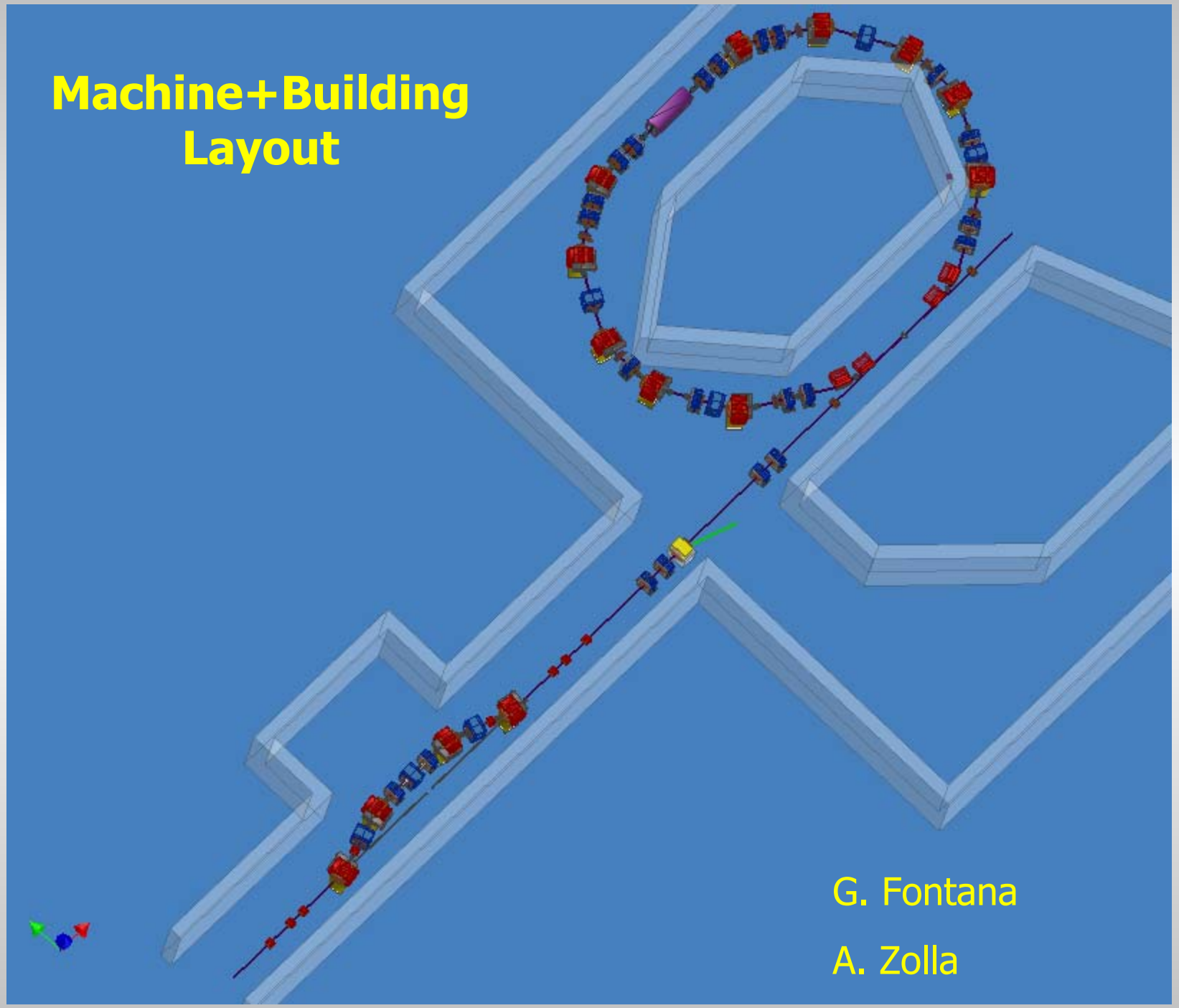


HARDWARE STATUS

A.Ghigo for CTF3 Collaboration

CTF3 Collaboration Meeting Geneva 30/09 – 01/10 2003

Machine+Building Layout

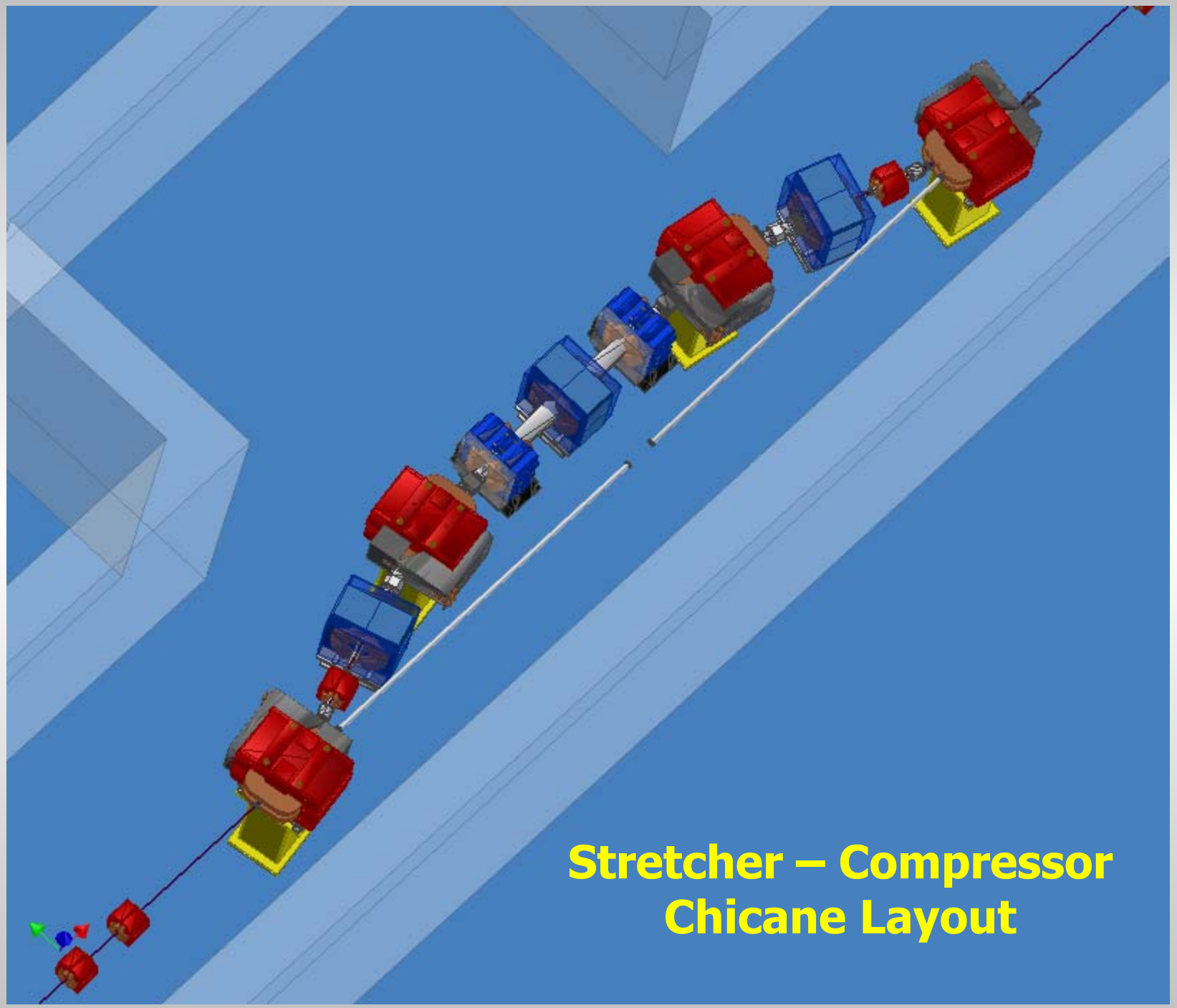


G. Fontana

A. Zolla

Frascati (INFN - LNF) collaboration

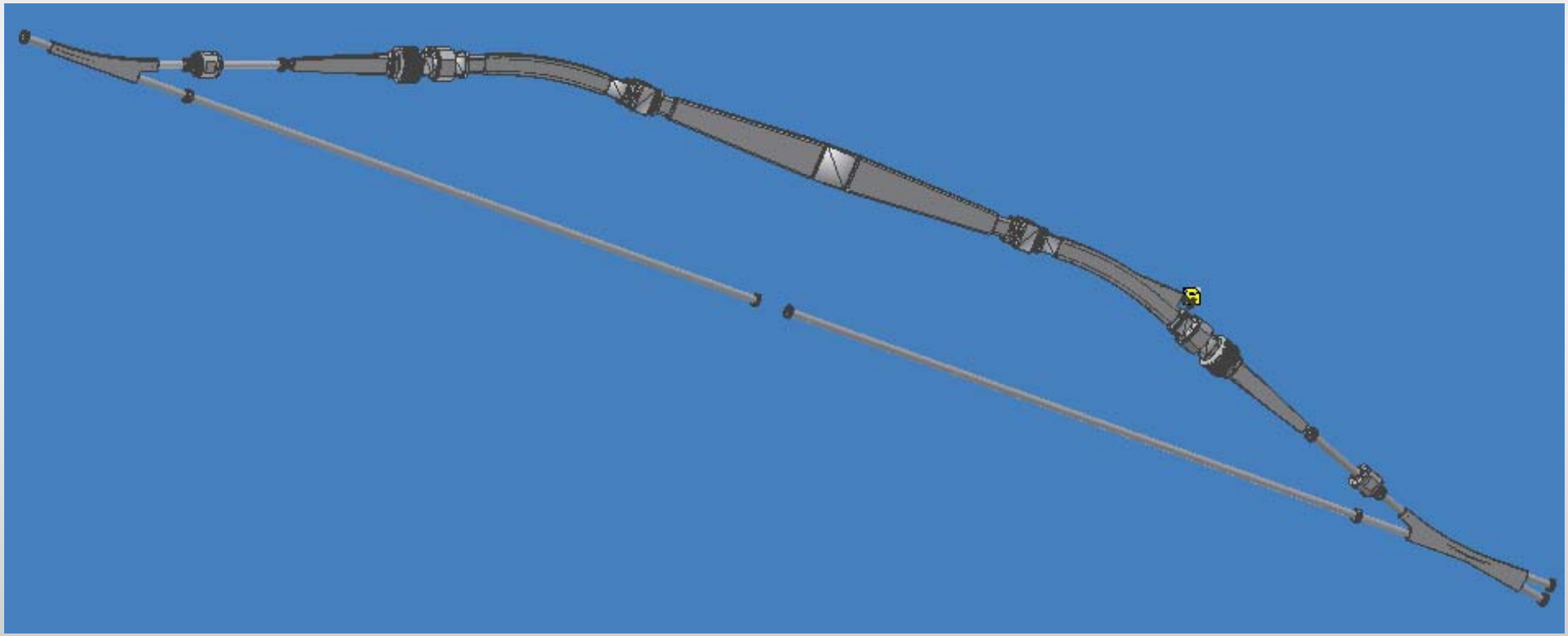
D.Alesini, C.Biscari, R.Boni, A.Clozza, G.Delle Monache,
A.Drago, A.Gallo, A.Ghigo (resp), F.Marcellini, C.Milardi,
L.Pellegrino, M.A.Preger, R.Ricci, C.Sanelli, M.Serio, F.Sgamma,
A.Stecchi, A.Stella, M.Zobov

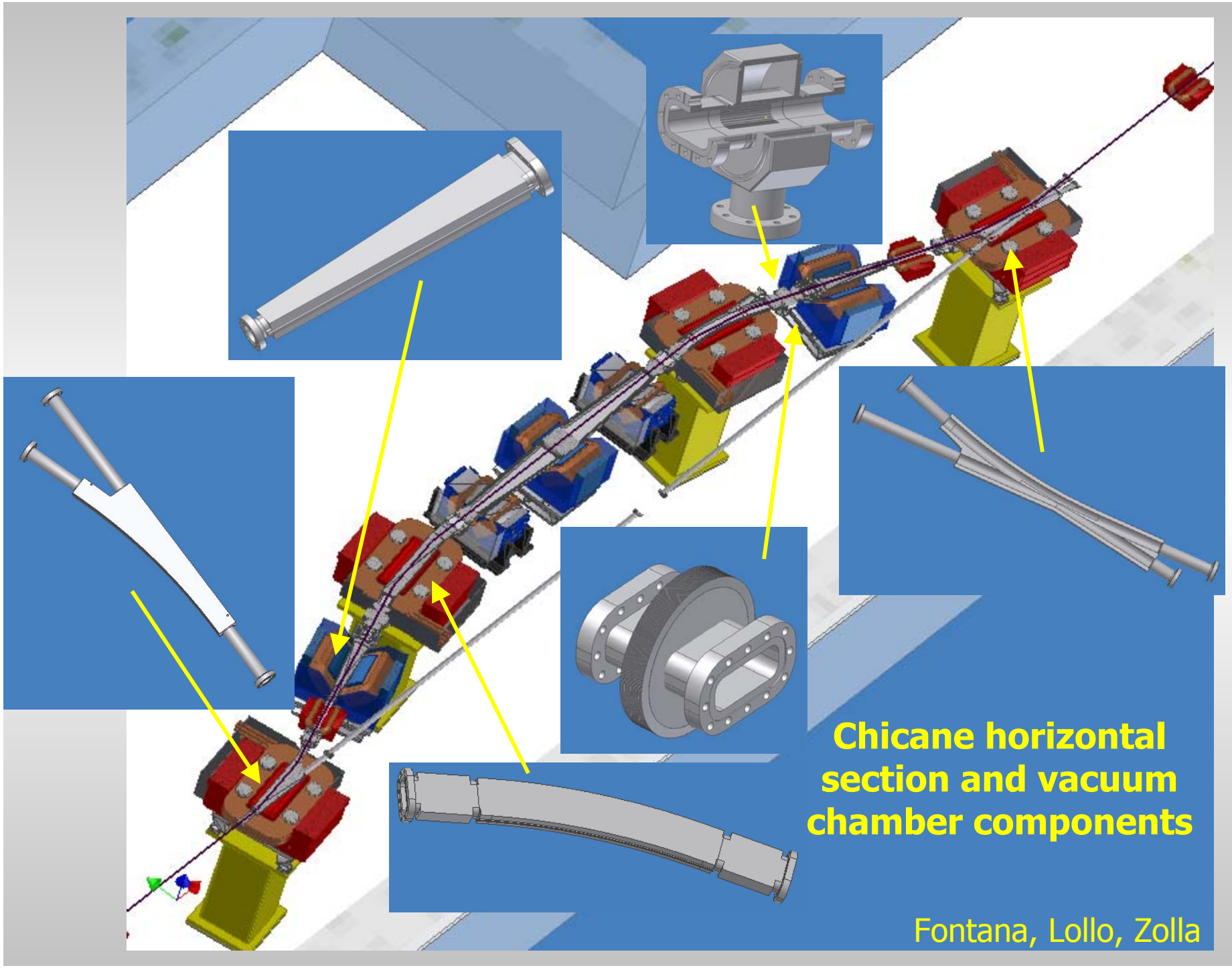

Stretcher – Compressor
Chicane Layout

Transfer Line Hardware status

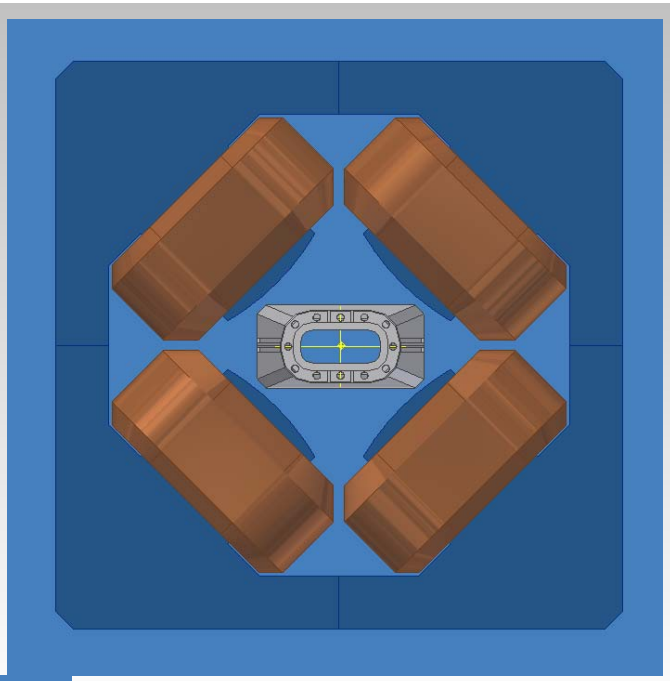
- Transfer Lines magnetic layout completed
- Chicane vacuum chamber drawings: completed (including by-pass)
- TL Vacuum Chambers components ordered:
  - Dipole vacuum chambers (4)
  - Chicane tapered vacuum chamber (3)
  - Pump sections (14 TL+DL)
  - By-pass vacuum chamber (7)
- TL Vacuum Chambers components mechanical drawing ready:
  - Beam position monitor
  - Bellows

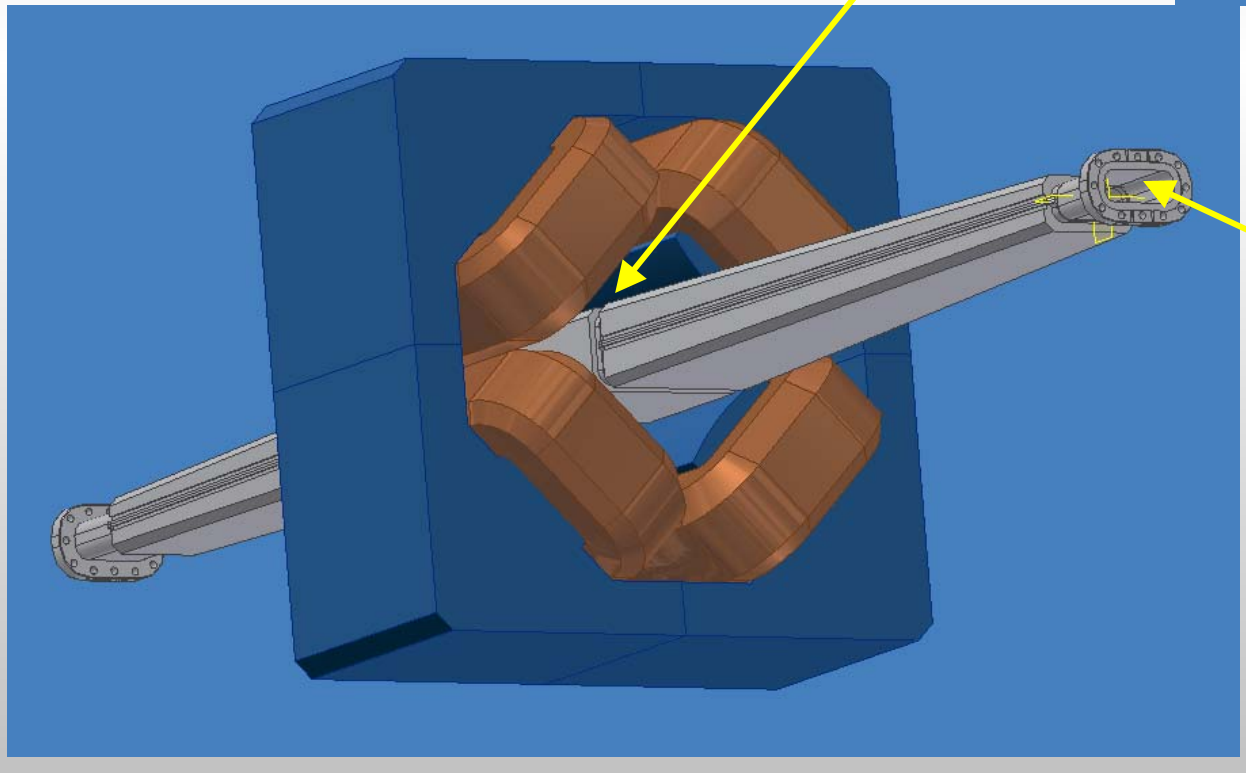
Chicane (arch) beam pipe view



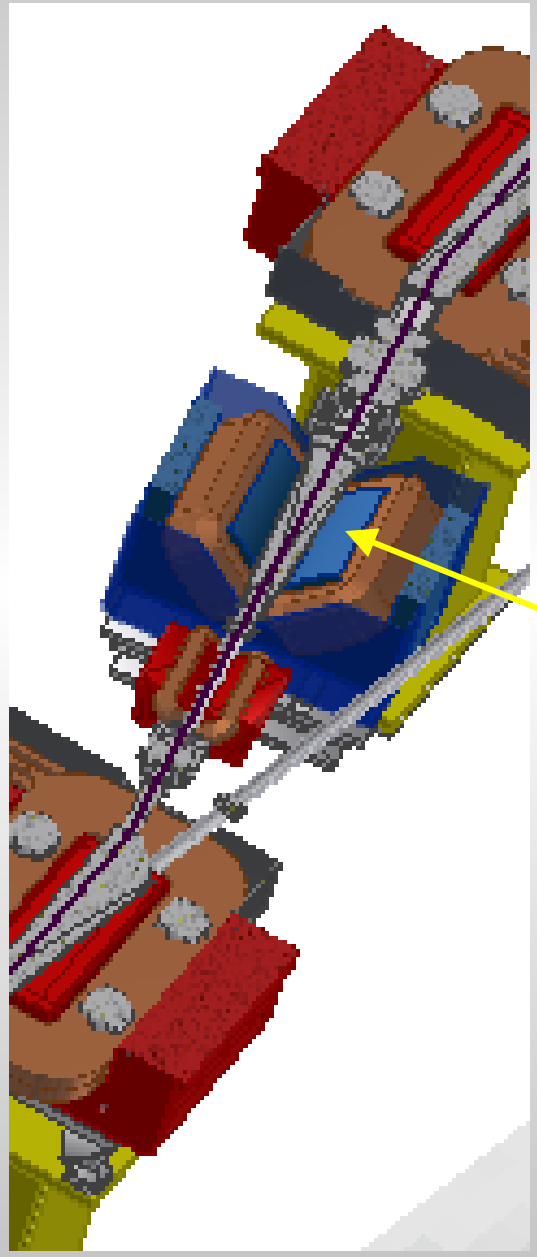

Chicane horizontal section and vacuum chamber components
Fontana, Lollo, Zolla

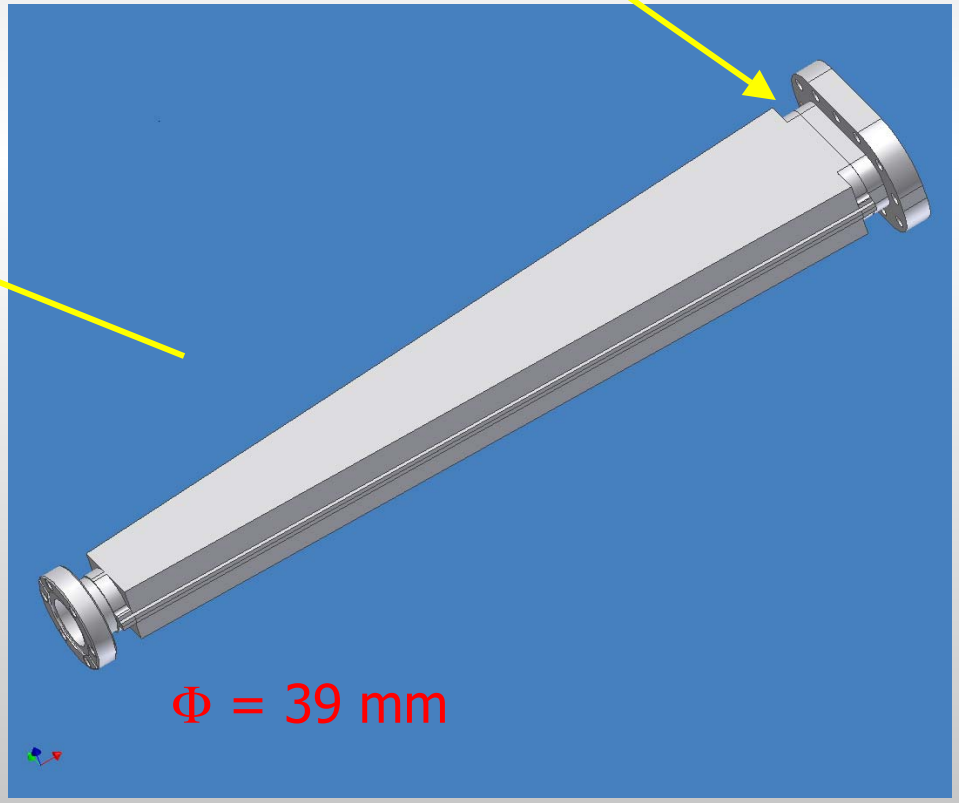
Long tapered central vacuum chamber of the chicane: transverse aperture

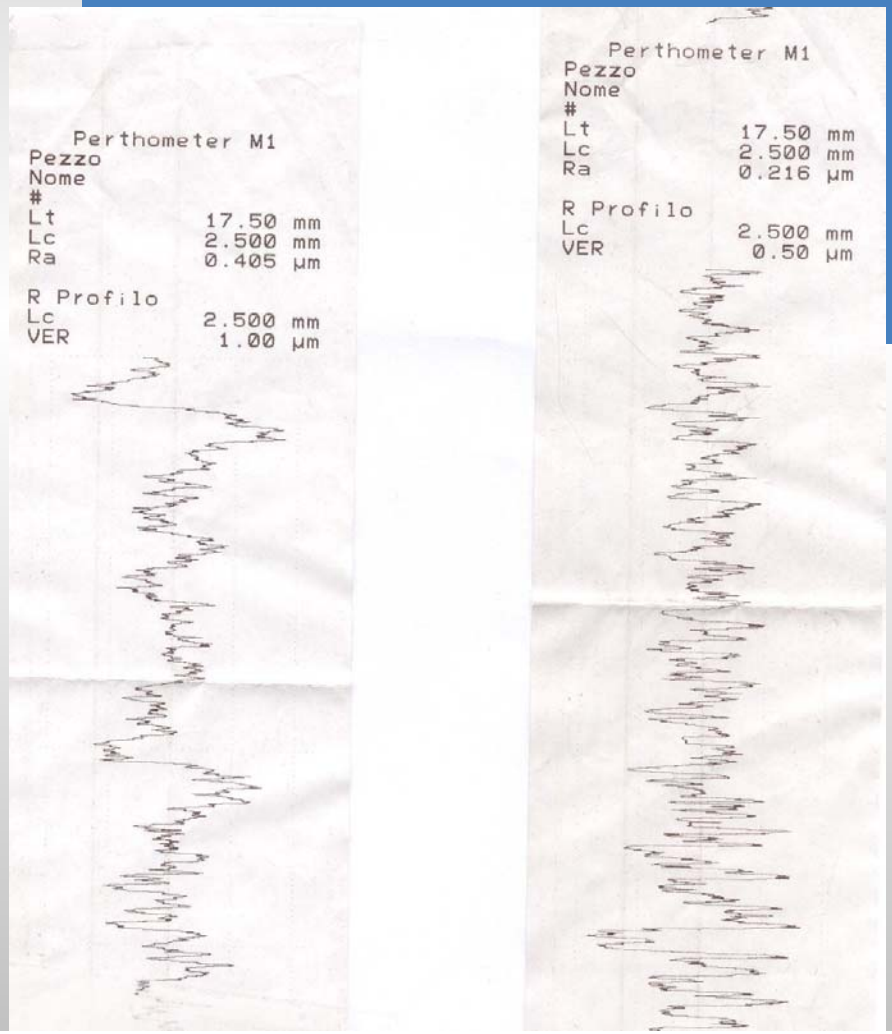




Tapered vacuum chamber of the chicane: transverse aperture







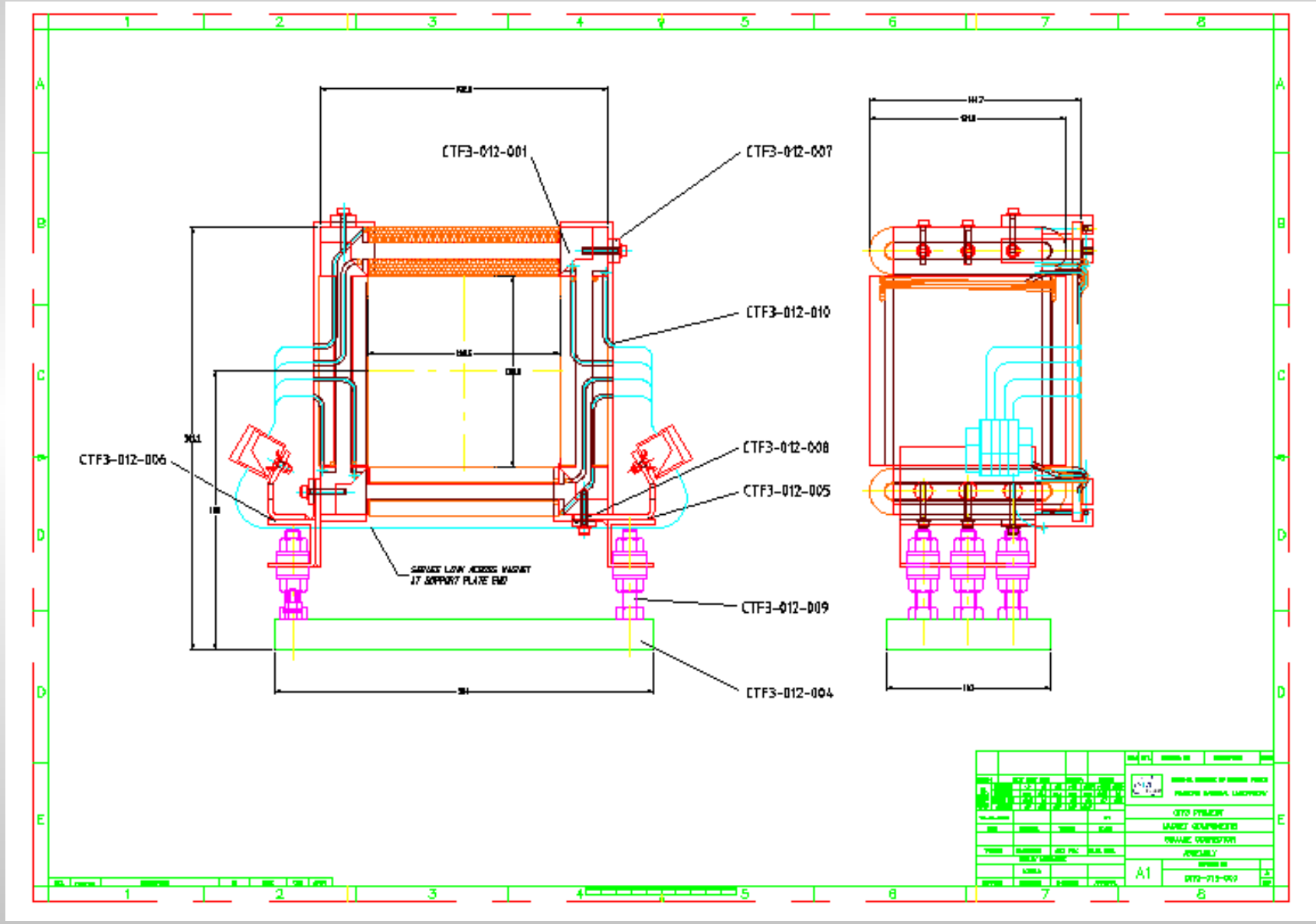
First realized aluminum vacuum chamber roughness

$R_m < .4\ \mu m$

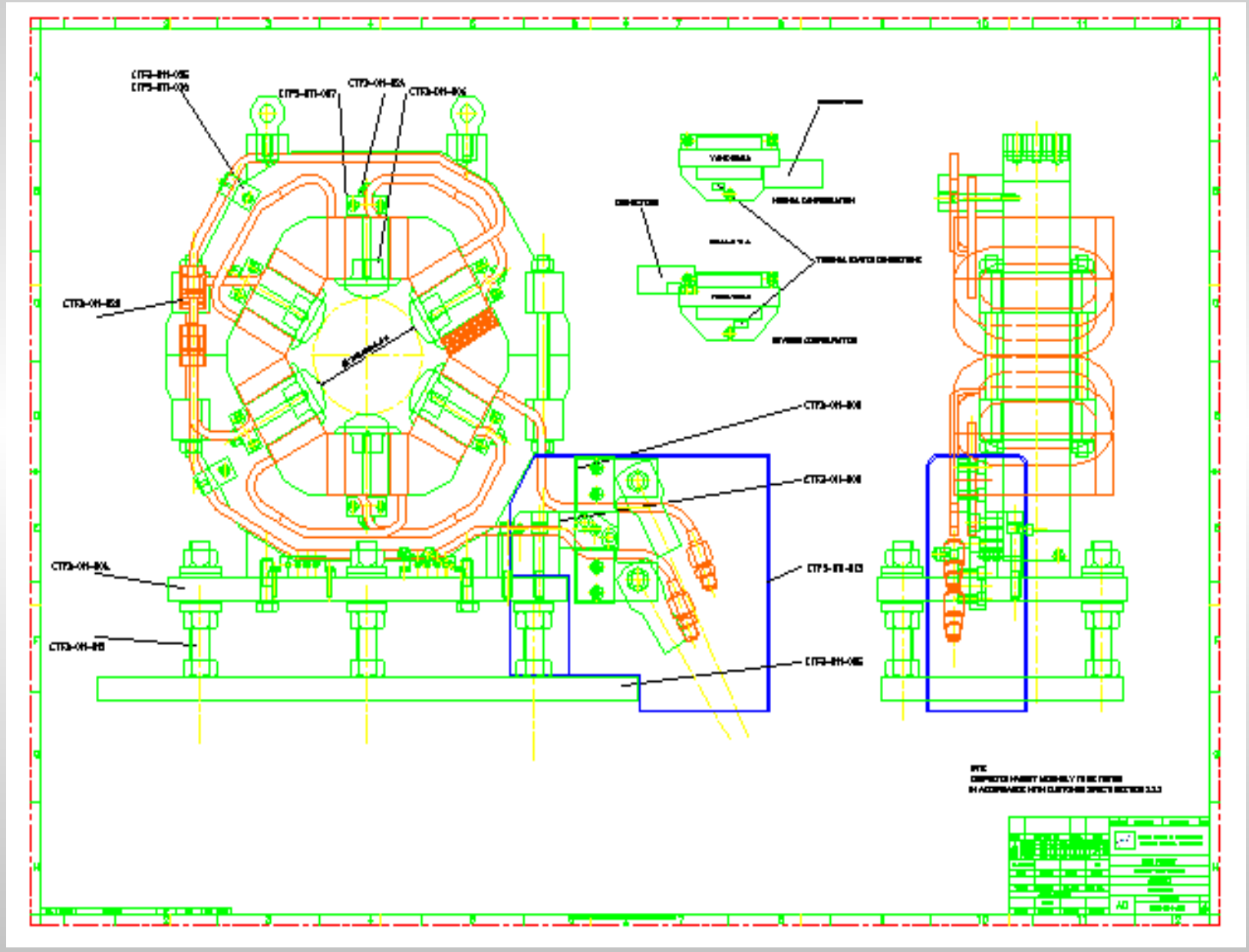
Missing Magnets Status

- 22 Corrector magnets:
  - Request for INFN authorization: 26 June 2003
  - tender request: 15 September 2003
  - contract signature: 15 December?
  - First delivery (Linac+TL): April-May 2004
  - Second delivery (DL): October 2004
- 8 Sextupole magnets:
  - Request for INFN authorization: 7 July 2003
  - tender request: 15 September 2003
  - contract signature: 15 December?
  - First delivery (chicane): June 2004
  - Second delivery (DL): December 2004

Corrector magnet assembly drawing

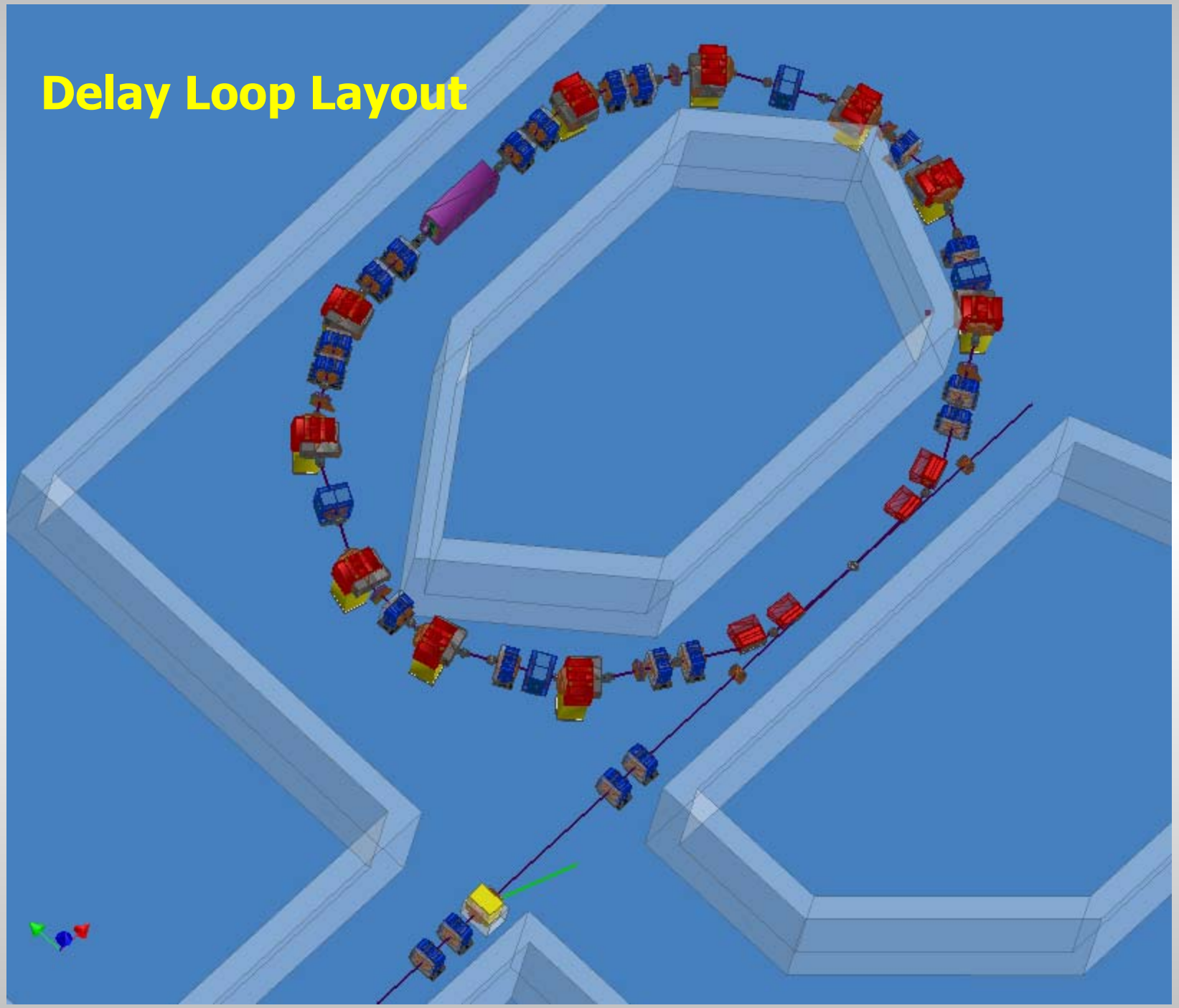


Sextupoles magnet assembly drawing



- 6 Quadrupoles Magnets (QL):
  - ordered through CERN: July 2003
  - Delivery February 2004?
- 1 Wiggler magnet:
  - Technical specs and mechanical drawing: November 2003
  - Request for INFN authorization December 2003
  - Delivery February 2005?

Delay Loop Layout



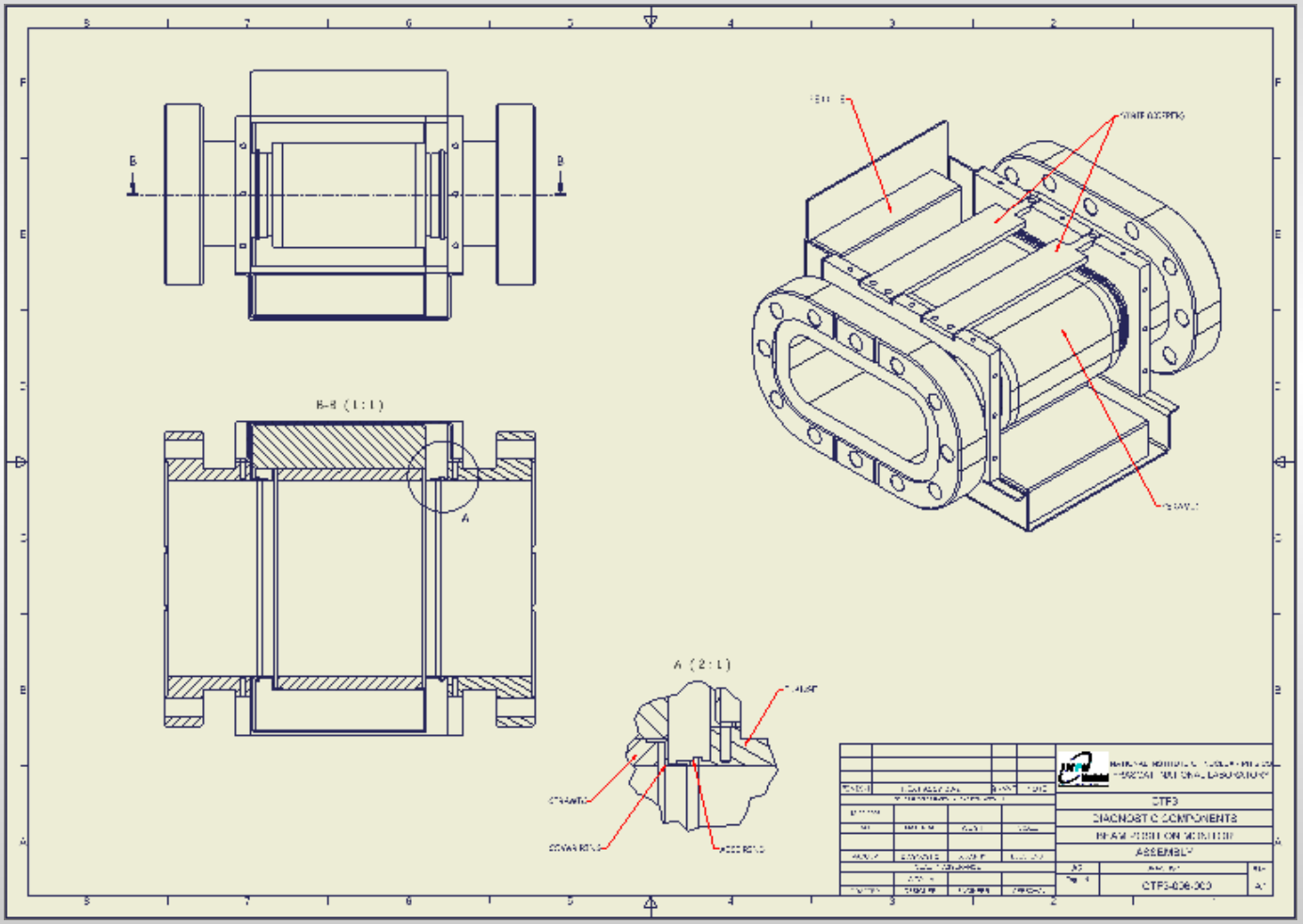
Delay Loop Hardware status

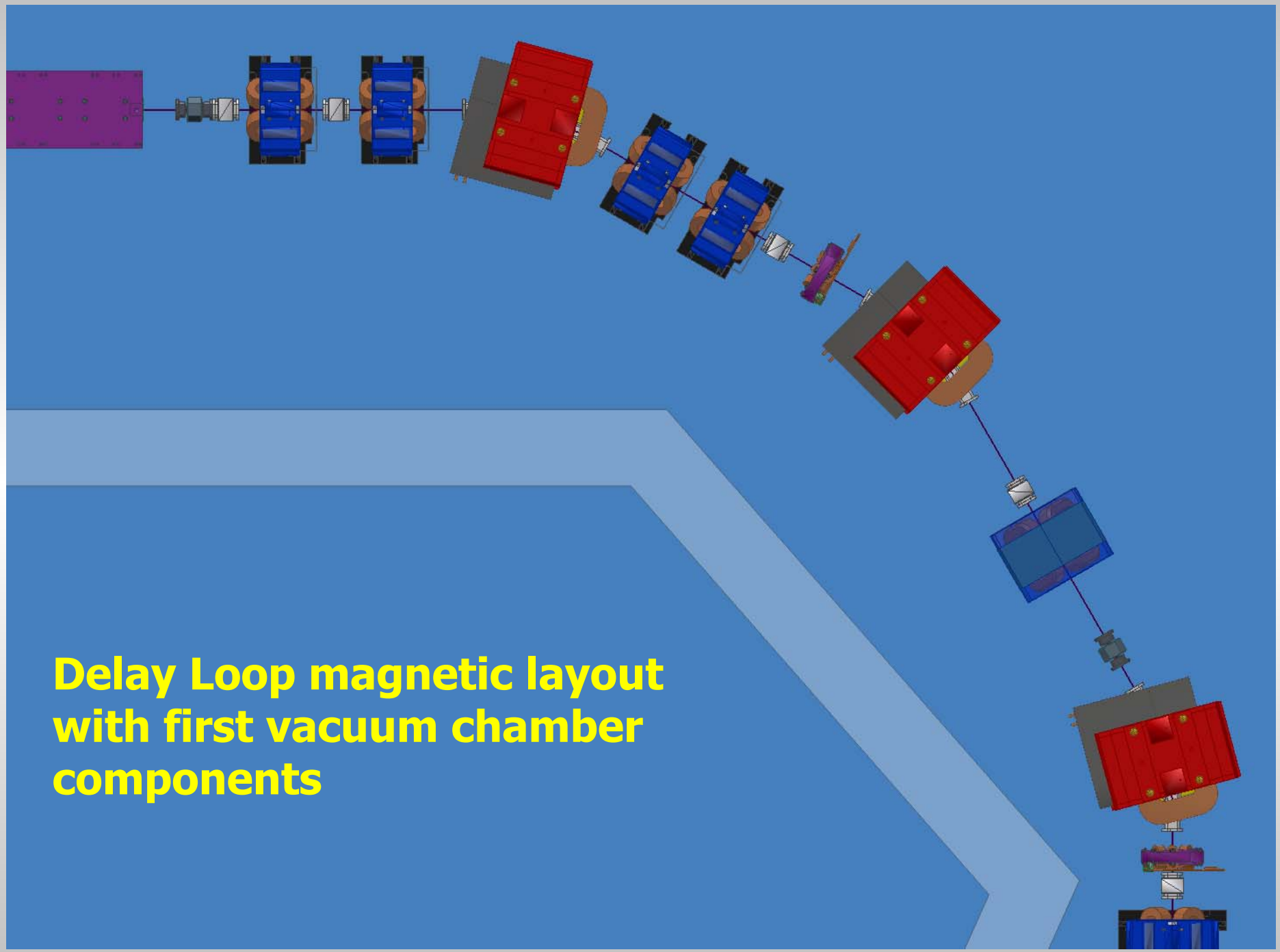
- Delay Loop magnetic layout has been completed, some refinements are necessary
- DL Vacuum Chambers components ordered:
  - Pumping sections
- DL Vacuum Chambers components mechanical drawing ready:
  - Beam position monitor
  - Bellows
  - Dipole magnet vacuum chambers
- DL 1.5 GHz RF deflector electromagnetic design almost finished
- Injection-extraction region vacuum chamber: to be studied

Electronics and magnets power supplies status

- VME Digitizer boards for BPM and current monitors:
  15 delivered
- VME CPU for data acquisition:
  1 complete system in Frascati lab
- Power supplies list for TL and DL magnets using existing CERN PS has been compiled.
- Signal and power cabling: to be studied
- 1.5 GHz RF components: list in preparation

Beam position monitor mechanical drawings





Delay Loop magnetic layout with first vacuum chamber components

Transfer Line and Delay Loop planning

ID	Task Name
1	**1. TransferLine**
2	1.1 TL Layout
3	1.2 TL Vacuum chambers
4	1.3 Magnets
5	1.4 Supports
6	1.5 Diagnostics
7	1.6 TL Installation
8	1.7 Magnets Cabling
9	1.8 Diagnostics cabling
10	TL test start
11	**1. Delay Loop**
12	1.1 DL Layout
13	1.2 DL Vacuum chambers
14	1.3 Magnets
15	1.4 Supports
16	1.5 Diagnostics
17	1.6 DL Installation
18	1.7 Magnets Cabling
19	1.8 Diagnostics cabling
20	DL test start