

## Short Summary of the DT Session

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## DT assembly:

- 3 assembly sites well advanced, 4th started:  
Aachen 44, Legnaro 44 and Madrid 54 DTs done (=72% out of 210 to install)  
Torino started (will install further 40 DTs)
- Production of main components running fine (plates, cathodes) or even finished (honeycomb panels)
- New HVB\_v5: first sample of PCBs expected this week; larger sample ordered. Substitution of these distribution boards is major action item.
- Additional external DT covers arriving now



## MB4 assembly status



We have presently mechanically built 1 dummy SL + 1 complete SL + 1 almost complete (4 layers) SL

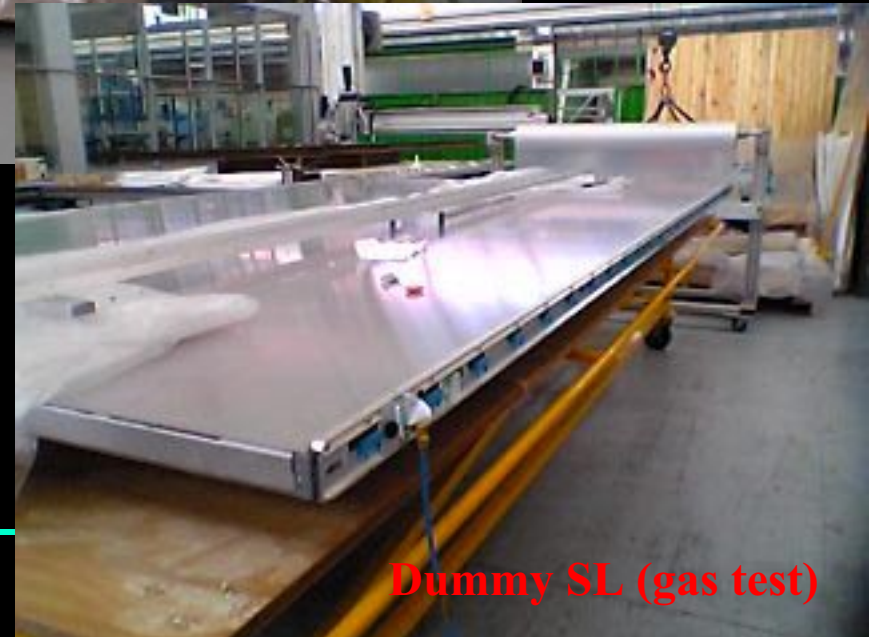


SL\_002



SL\_001

Gas test ok



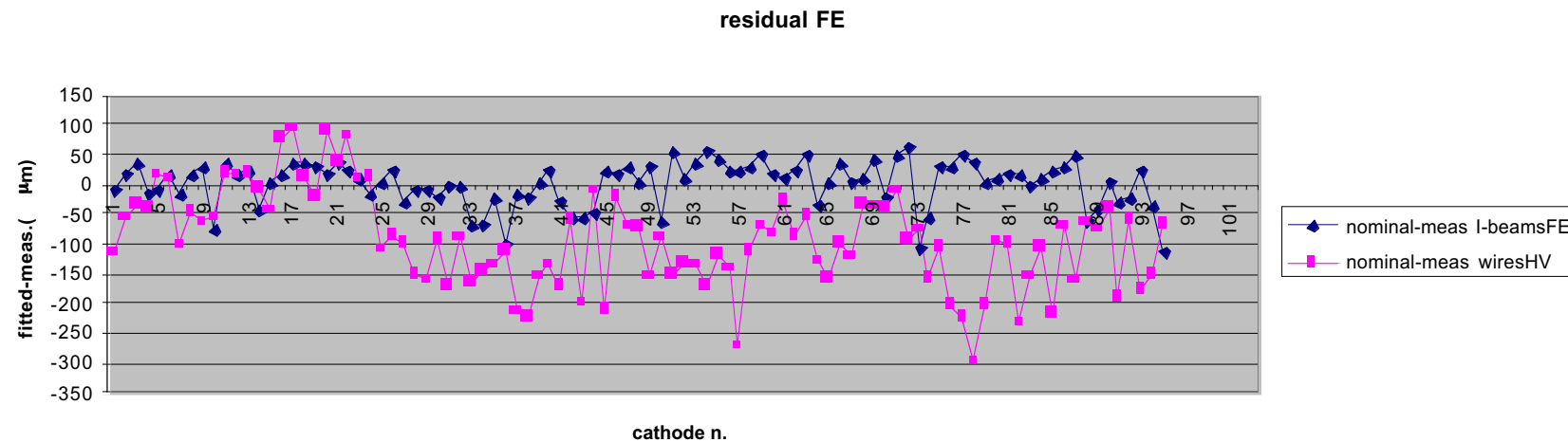
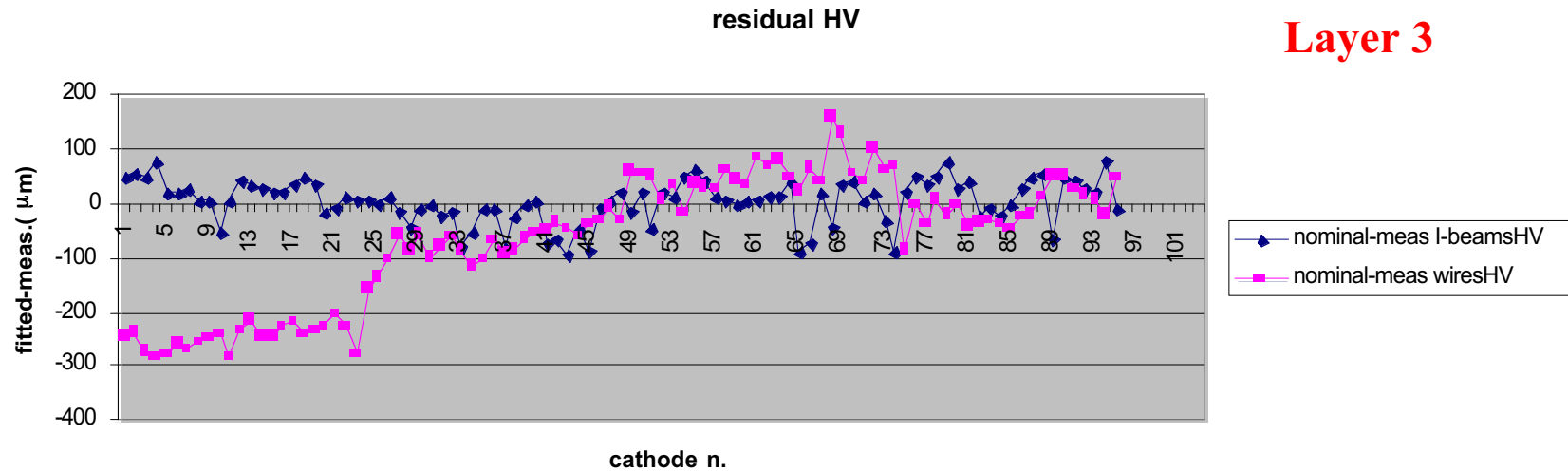
Dummy SL (gas test)

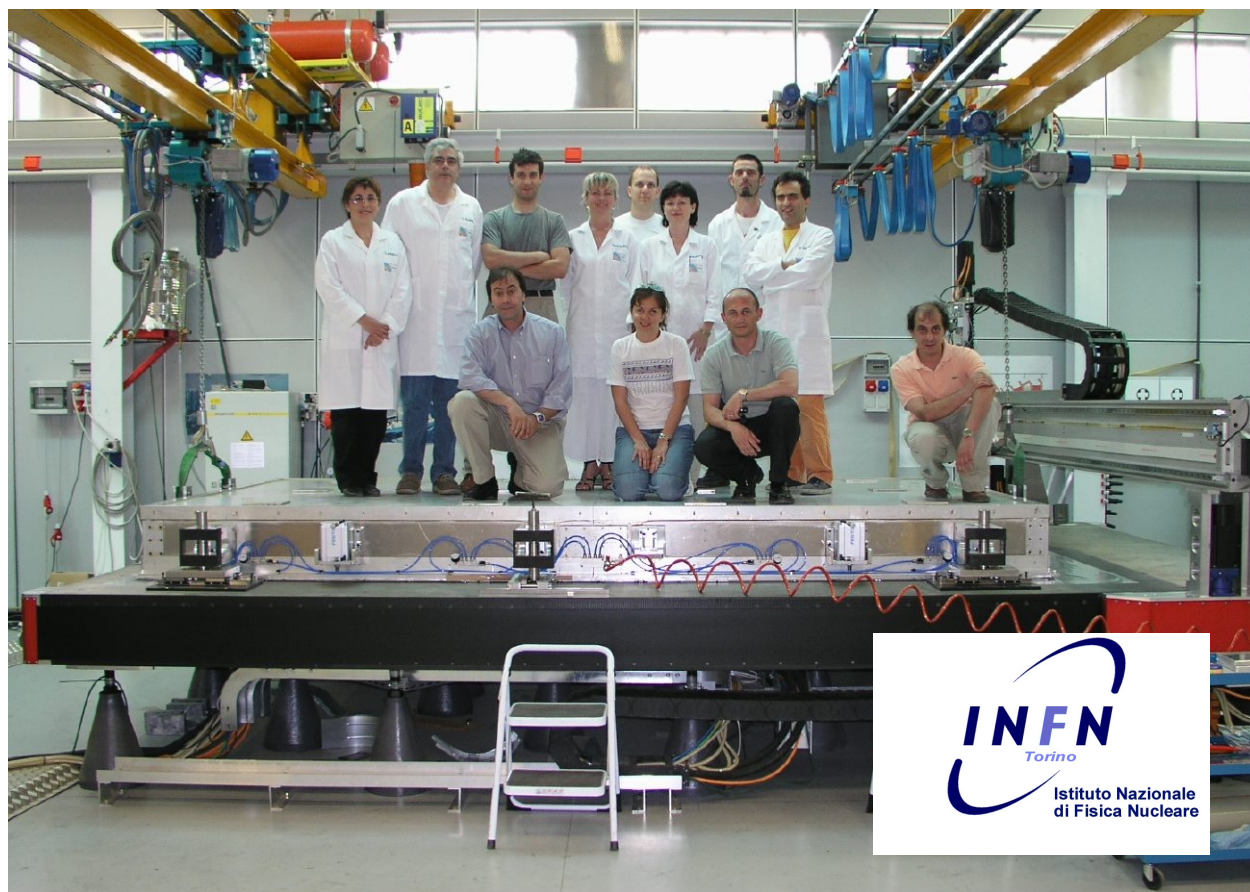


# SL measurements: SL\_002



## Layer 3





DT assembly crew at Torino:  
 Guido Alampi  
 Domenico Dattola  
 Giovanni Ughera  
 Svetlana Kil'chakovskaya  
 Grazhina Kosteleva  
 Silvia Maselli  
 Paolo Mereu  
 Vincenzo Monaco  
 Riccardo Panero  
 Marta Ruspa  
 Roberto Sacchi  
 Amedeo Staiano  
 Enrico Vacchieri  
 Antonio Zampieri



The Torino crew, happy with the two first DT SuperLayers done, here “testing the main gluing tool”...

# Chamber Production Status @ Aachen

## ❖ Superlayers:

	<b>End 2003</b>	<b>Status 06.06.04</b>
Mechanics	123 SL	154 SL
Completely tested	113 SL	132 SL
Assembled with HVB		132 SL**

\*\*HVB from ISR chambers available for 34 SL in total

→ ISR HVB being used right now

→ Reason for difference in number mech.-tested SL:

1. No HVB for some time.
2. Assembly speed slightly reduced due to ISR work.

## ❖ Chambers

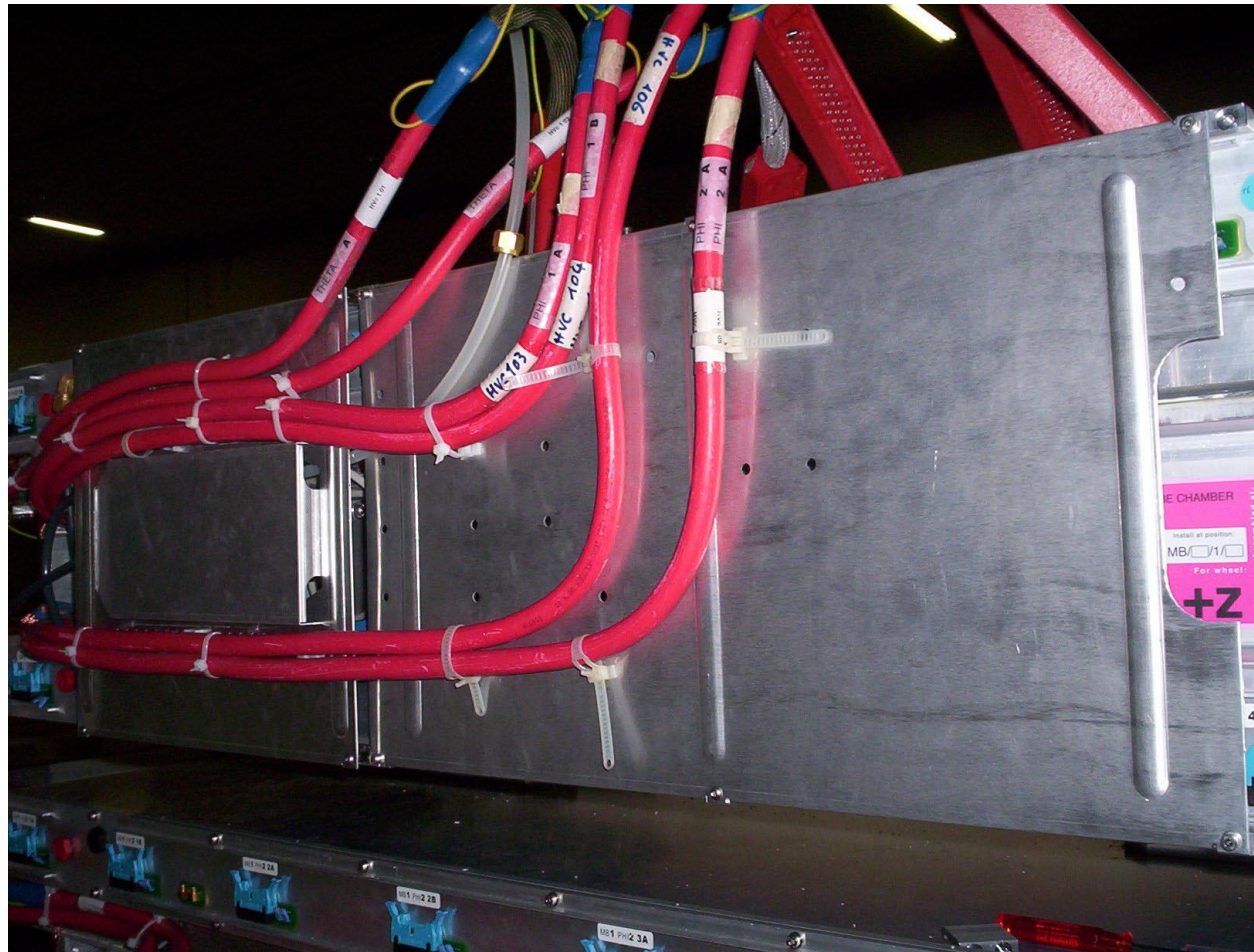
	<b>End 2003</b>	<b>Status 06.06.04</b>
Package of 3 SL + HC	38	45
Really glued chambers	36	44

## ❖ Next shipment to CERN: 15.06.04 (8 chambers)





# manifold carter





## News since Aachen

- 3MB3 and 2 MB4/4 arrived in May. The chambers have gone through the cosmic ray tests and are now under HV. No major problems found.
- 4 (?) MB2 and 8 MB1 are schedule to arrive next week bringing the **DT count at the ISR to 132**
- The next alignment calibration campaign will start next week ( 26 Chambers)
- Replacing HVBs and testing with cosmics has been the major activity.

## DT installation:

- Installation on YB+2 scheduled 2004
- Gas + cooling pipes: ~90% done on YB+2, 80% on YB+2, ...
- Supports for MB1 available; to be mounted in few weeks
- Radial cable trays being tested, to check cable layout (little space!)

Mounted support  
for MB1 and  
HO.



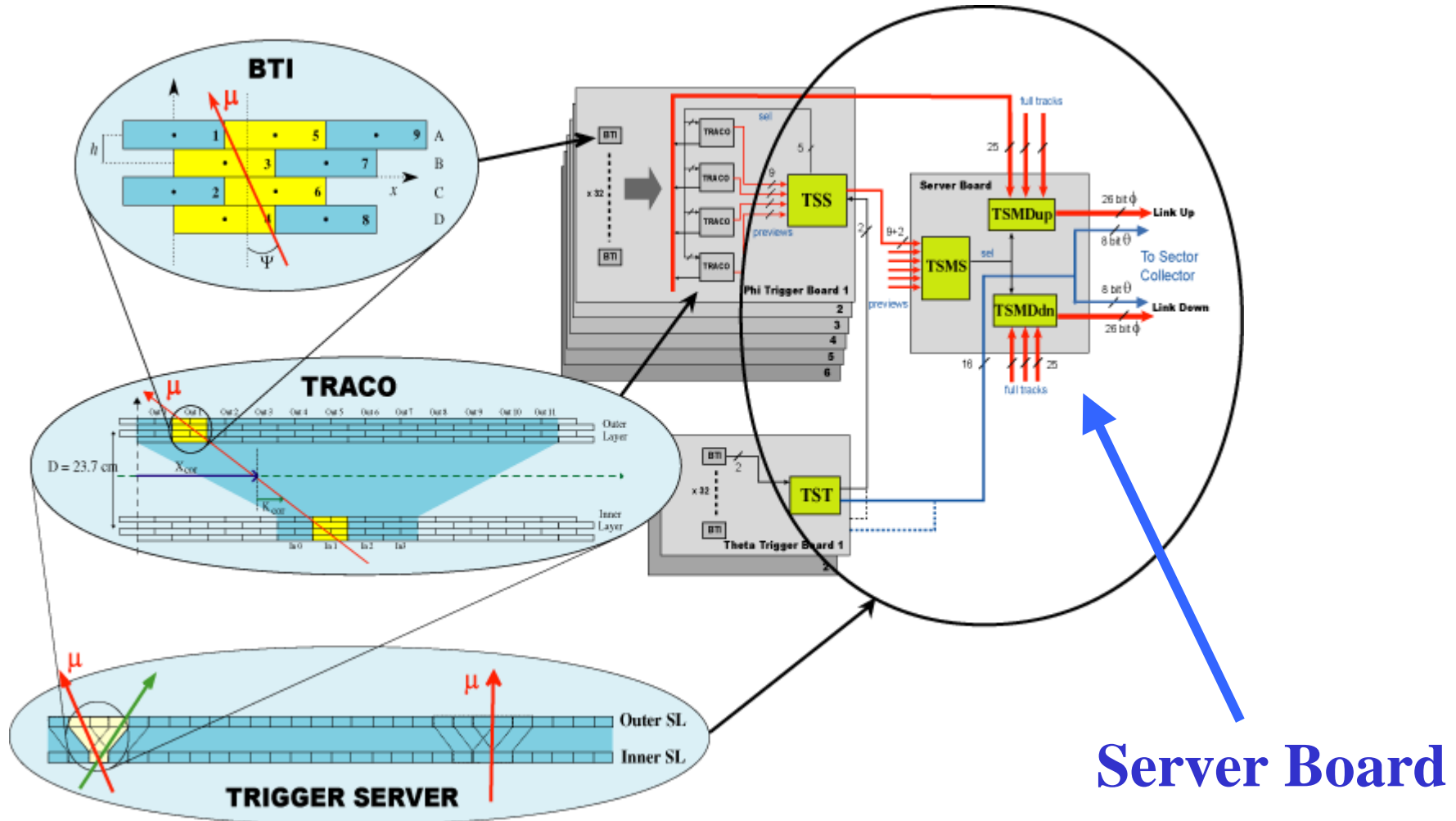
## DT electronics:

- Signal frontend is inside DT (done along assembly)
- Readout + trigger primitives are in “Minicrate” MC located on DT
- MC mechanics + read out & test done at Madrid; then trigger boards & test done at Padova and Bologna.
- Mass production + test of MCs started; 10 MCs shipped to Padova

**Our plan is still to send 16 new MC's to Legnaro be end on June.**

**5 MB1 L**  
**2 MB2 L**  
**3 MB3 L**  
**4 MB4 L**  
**2 MB4 (4) L**

This completes YB+2 top (Sep. To Nov)  
plus 5 MB1 for YB+2 bottom.



**Server Board**



# Summary



- Pre-series SB provides us 24 good working boards (trying to recover the not working ones)
- 1<sup>st</sup> batch of the final production (50 SB) underwent connectivity and dynamic test.
- 36 SB are perfectly working
- 12 have minor failures (recoverably with a little reworking)
- 2 show critical failures (under investigation, but in accordance with the 96% yield guaranteed by producers)
- 200 SB will be delivered in fall '04
- Burn-in: all SB
- Initially at 60 degrees for 160 hours, then the procedure could be tuned according to the results.
- Setup is being prepared in Bologna

## DT:

- DT assembly at sites progressing well; next large ongoing efforts are:
- HVBs and their substitution (became critical item)
- Moving to installation phase (not there yet)
- MC mass production started (is still critical item)