

IPBPM / IP chamber / movers  
The second goal  
Nanometer Stabilization at the IP

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LAL group

LAL<sup>1</sup>, CERN<sup>2</sup>

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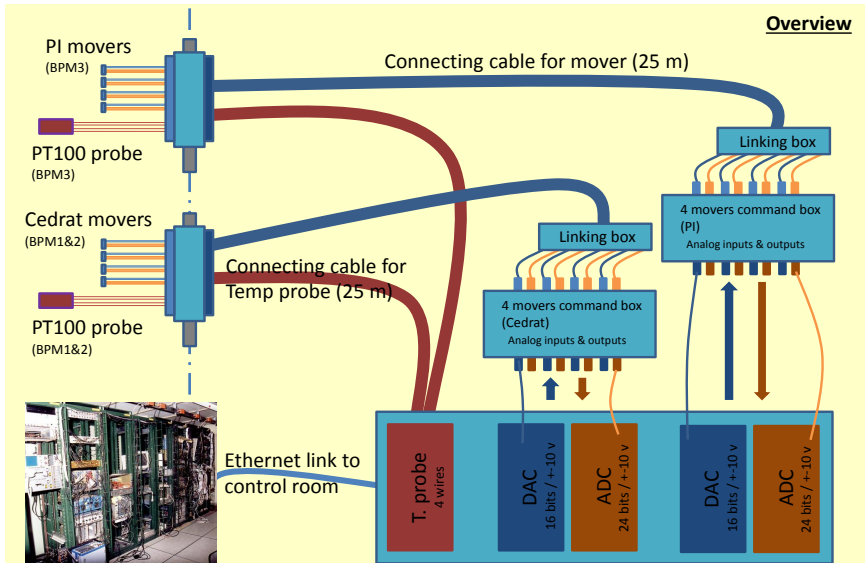
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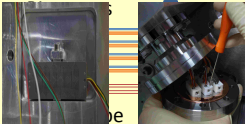
Conclusions

# Movers System

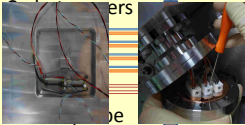
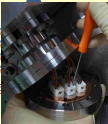


# Movers System

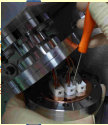
## Overview



(BPM3)

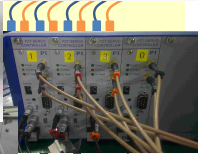
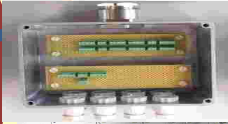


(BPM1&2)

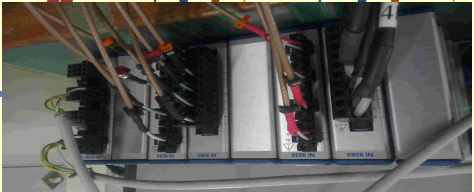


Connecting cable for  
top probe (25 m)

Connect

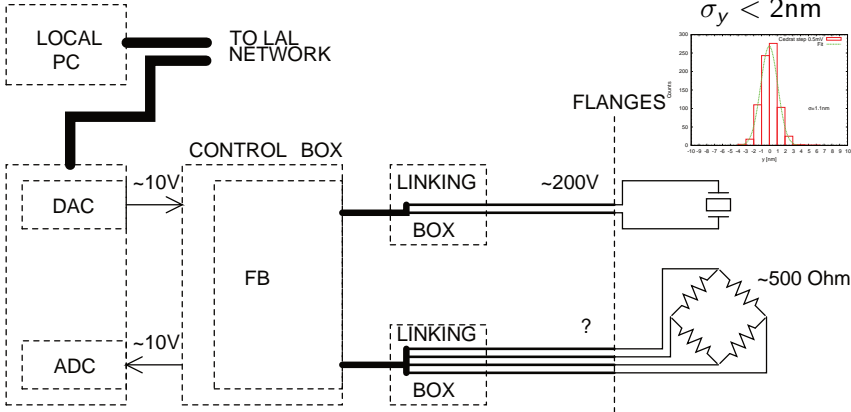


Ethernet link to  
control room



# Movers System (cont.)

During tests at LAL

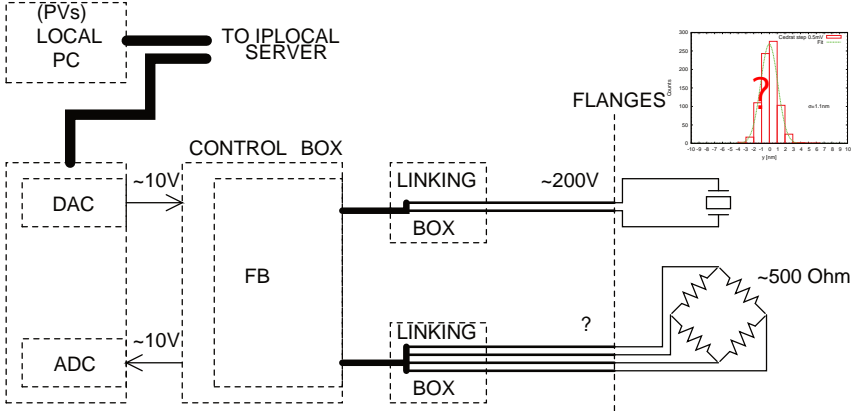


Noise < 2mV was measured by the ADCs

BLOCK AB 1mV=31.25nm, BLOCK C 1mV=30nm

# Movers System Current Status

During tests at LAL



Noise about  $\sim 2\text{mV}$  was measured by the ADC BLOCK AB  
 $\sim 5\text{mV}$  for BLOCK C (appears and disappears)

BLOCK AB  $1\text{mV}=31.25\text{nm}$ , BLOCK C  $1\text{mV}=30\text{nm}$

# Conclusions

- ▶ Direct measurement vertical stability is required.  
Installation of an interferometer is under consideration.
- ▶ Discussions are programmed at FJPPL-FKPPL ATF2 Workshop.  
March 17-19, 2014. Annecy, France  
<https://indico.in2p3.fr/conferenceDisplay.py?ovw=True&confId=9697>