

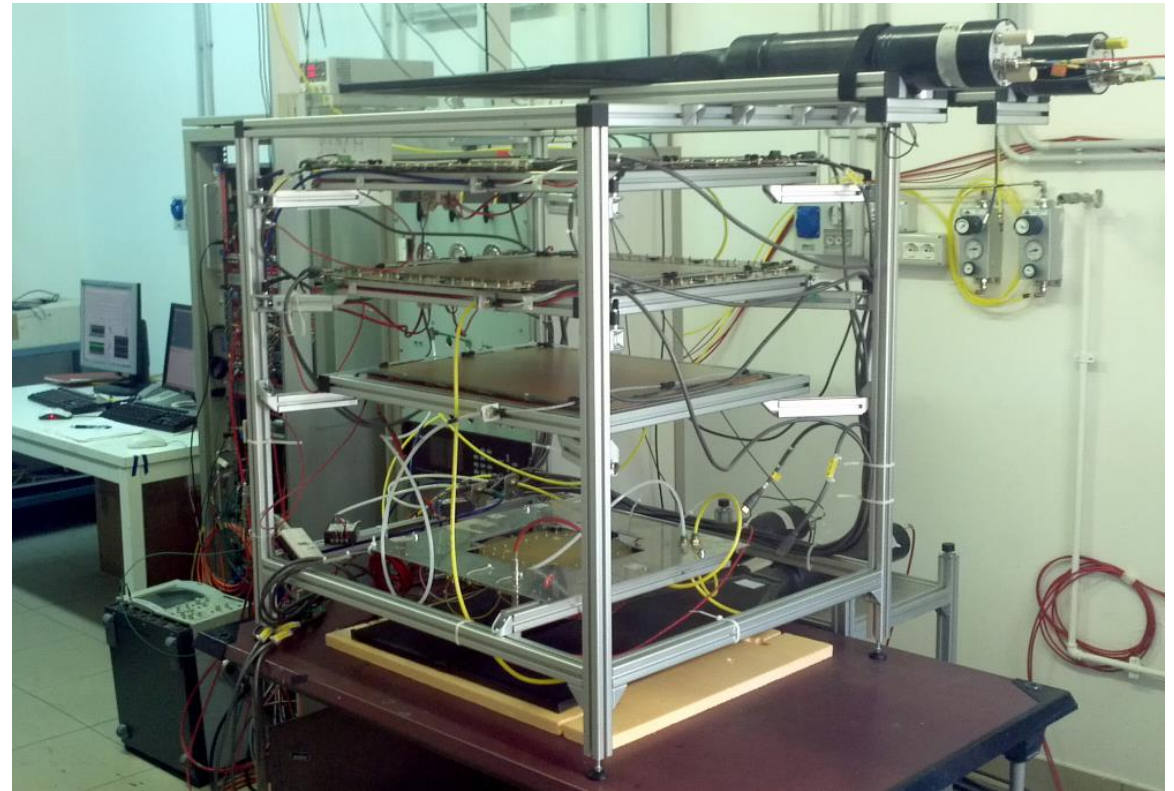
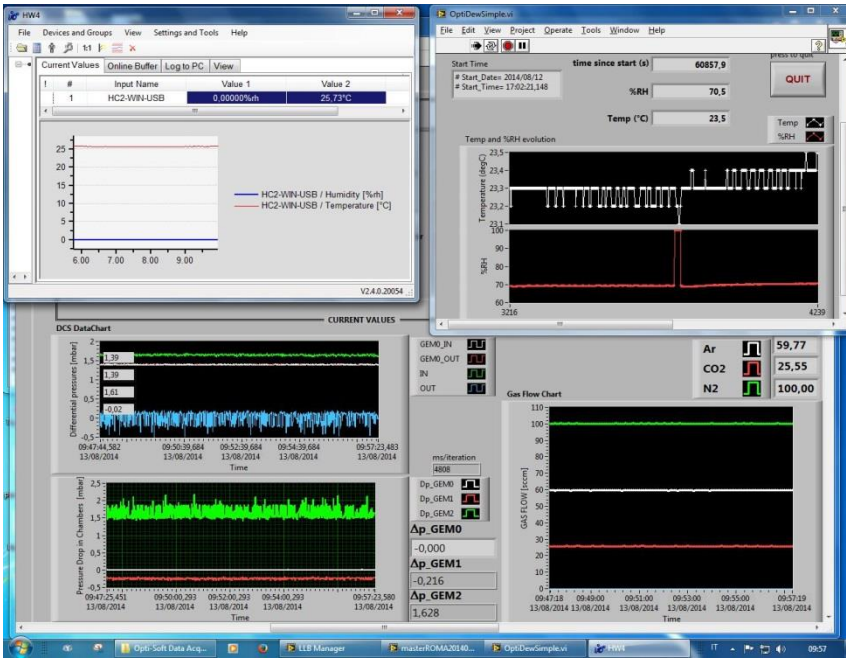
Front Tracker Status (since July/1st)

- GEM assembling (Catania)
 - 6th GEM module assembled in Catania; we now have 6 module, 3 of them under testing (cosmic)/curing
 - New HV divider tested up to 5500 V
- Test Setup (Rome)
 - Added N2 gas line for HV conditioning; improved gas control/monitoring system
 - Installed 4 large scintillator pads (25x50 cm² each) for cosmic trigger; coinc. trigger rate 0.2 Hz
- Electronics (Genova)
 - Designed a lightweight backplane made of G10+flex kapton (likely few prototype available in October)
- Software (Rome)
 - Improved common noise suppression (remove smallest and largest ADCs values) and x-y association
 - Finalized analysis of track algorithm convergence

HV Conditioning and Cosmic setup

Environmental conditions monitor
and gas control

Test stand



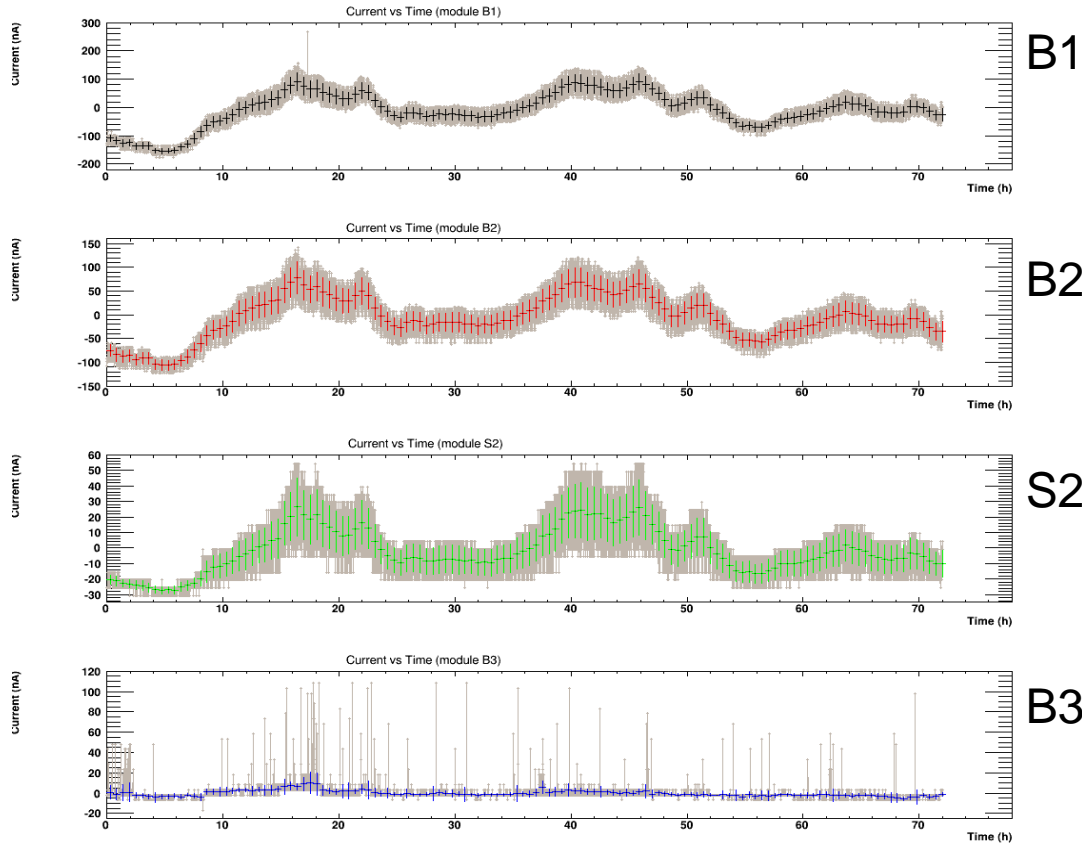
External Temp and Humidity
Internal Temp and Humidity
Gas flow control and monitor
Gas In and Out pressure

Hosts up to 6 modules + small reference chamber
2 + 2 large pads cover an area of about 50x50 cm²
Portable for beam test

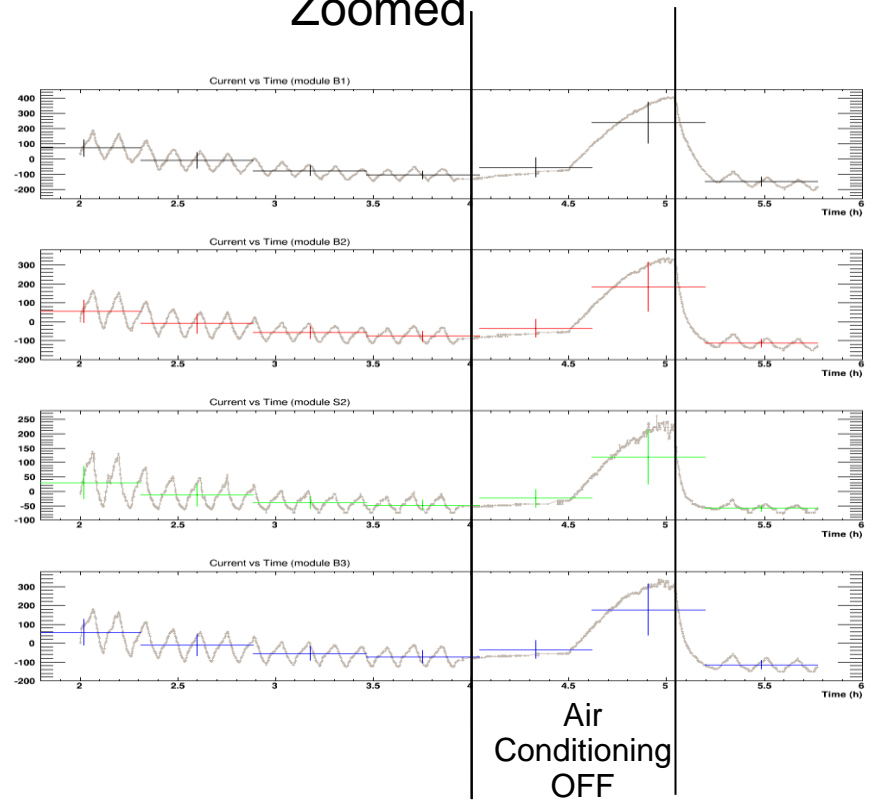
Main gas line include mechanical filter (220 μ m)
humidity filters

HV Conditioning

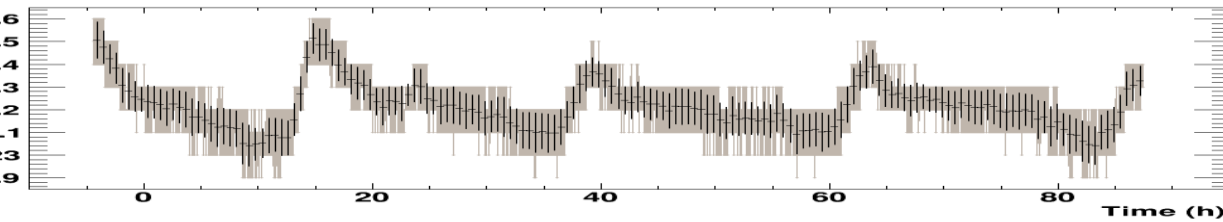
4200 V



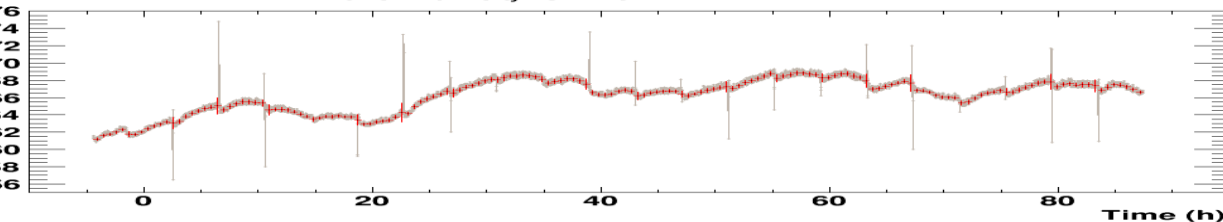
Zoomed



Ext. Temp vs Time



Ext. rel. Humidity vs Time



- ◆ Fluctuations related to ext temperature
- ◆ Periodic oscillations (400 s) related to air conditioner
- ◆ New module (B3) show many small “sparks”