

Weekly Reports - GIF++ Users Meeting

Meeting : 21.04.2022 - 14h

Announcements from GIF++ Coordination

- Test for the iC4H10 line of yesterday WED 20th didn't cause any stop for us. We are now trying to schedule a swap between the 907 & 909 (original place for the isobutane GIF++ supply line). Date to be fixed by next week.
- Access to the GIF++ bunker is possible at least until Friday evening. Please keep the area in key access when possible and do "end of access" when finished.
 - WED 20th normal access day. Beam pipe removed in the afternoon.
 - THU 21st & FRI 22nd can also be used to finish installations.
 - Keep the weekend free for irradiation and beam commissioning (if needed).
- Work on the extension of GIF control room has finally started ! Need to mount the windows and to adjust/add small things. Pic. below



- Pre-Dump will be installed "this week".
So we should have stable conditions throughout the beam time.
- **Update on Magnet problem for North Area** (see also presentation from Johannes)
 - Problem is on one of the wobbling magnets, linked to the interlock system.
 - Repair needed to be stopped due to high radiation levels and collected dose.
 - Cause for the fault is radiation damage to cable insulation. Touching cables can cause more problems.
 - On Friday, they will try to install an alternative interlock system (temperature) and use this instead.
 - If repair works -> no delay of physics start for GIF on Monday, as beam line is mostly setup already.
 - If Repair fails -> at least 3 week delay for replacing magnet. We will be informed Friday late evening.
- **Reminder : Strictly (!) no access to the bunker**

- without personal and operational dosimeter
- without access rights signed
- without safety equipment (and currently still masks)
- **Reminder : General safety**
 - Please use provided single-use gloves when handling led bricks !
- **And one last positive comment:** (meeting only)

Muon beam 2022 :

- Version 0.6 of schedule now available. Additional week of beam allocated to GIF++
 - Only expected uncertainty : October beam time might move (linked to NP04)
 - Request from RD51 : Two setup will run parasitically in upstream area (PICOSEC/timing MCP-PMT characterization and straw/VMM3A readout capabilities validation). Will depend on usage of pre-dump for muon production.
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Weekly Reports :

Please update before or during the meeting !

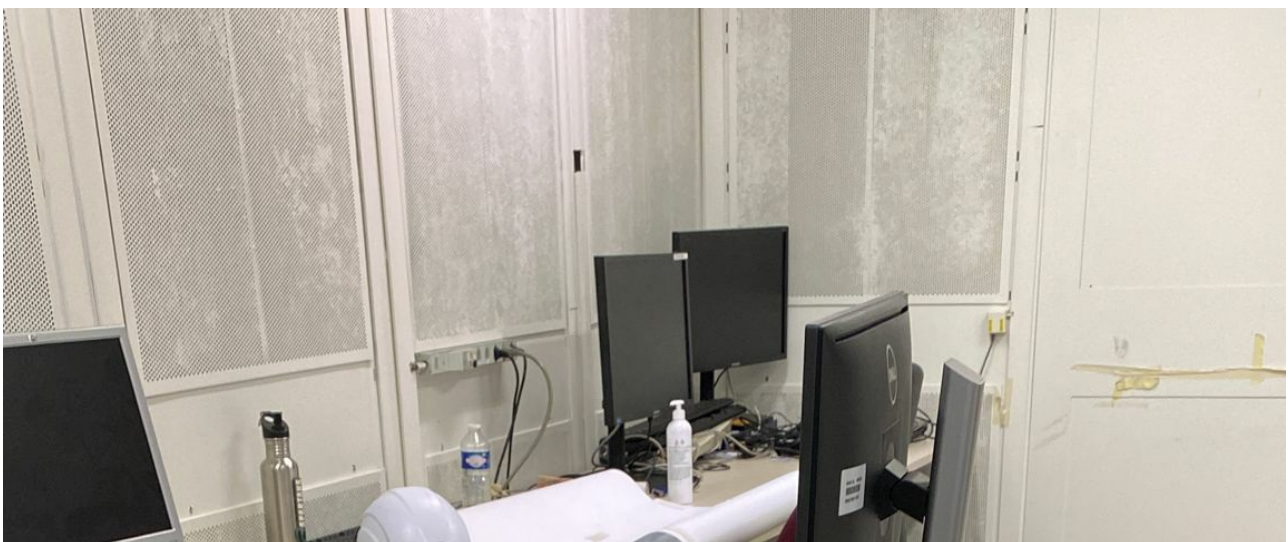
ATLAS-RPC: (Luca, Giorgia, Sinem, Ahmet)

- The person power is busy with the cavern activities. The detailed plan for the tests at GIF++ will be discussed after the closure.

ATLAS-MM: (Francesco, Givi)

update dated 21/04/2022:

- **Setup maintenance / Test Beam**
 - we started preparing the setup / services for the upcoming test beam.
 - this afternoon source OFF from 14:30 to 18:30; we reserved slot to access the bunker and finalize the setup.
 - small problem!





- **Weekly plan**

- continuation of aging studies with Ar/CO₂/iC₄H₁₀ gas mixture for hanging trolley.

ATLAS-sTGC (Margaret):

- No current setup at GIF++, and will not return until the later 2022 testbeam periods. Plan to join in July and October beam times, sharing setup with MM maybe as before, exact details (Frame? DAQ? Trigger?) TBD, but will most probably want to be nearby if not in same frame
- At that time will use same npentane mixture as before

CMS-CSC: (Katerina)

- Purifier replacement hopefully today 6:30 pm. Then several days purging + source ON test at the irradiation position. Then (if everything is ok) moving chamber to the TB position (Su or We).

CMS-GEM: (Davide, Michele, Ashok)

updated 20/04/2022

Slot for test beam: 13/07-20/7

- Off up to 4/5

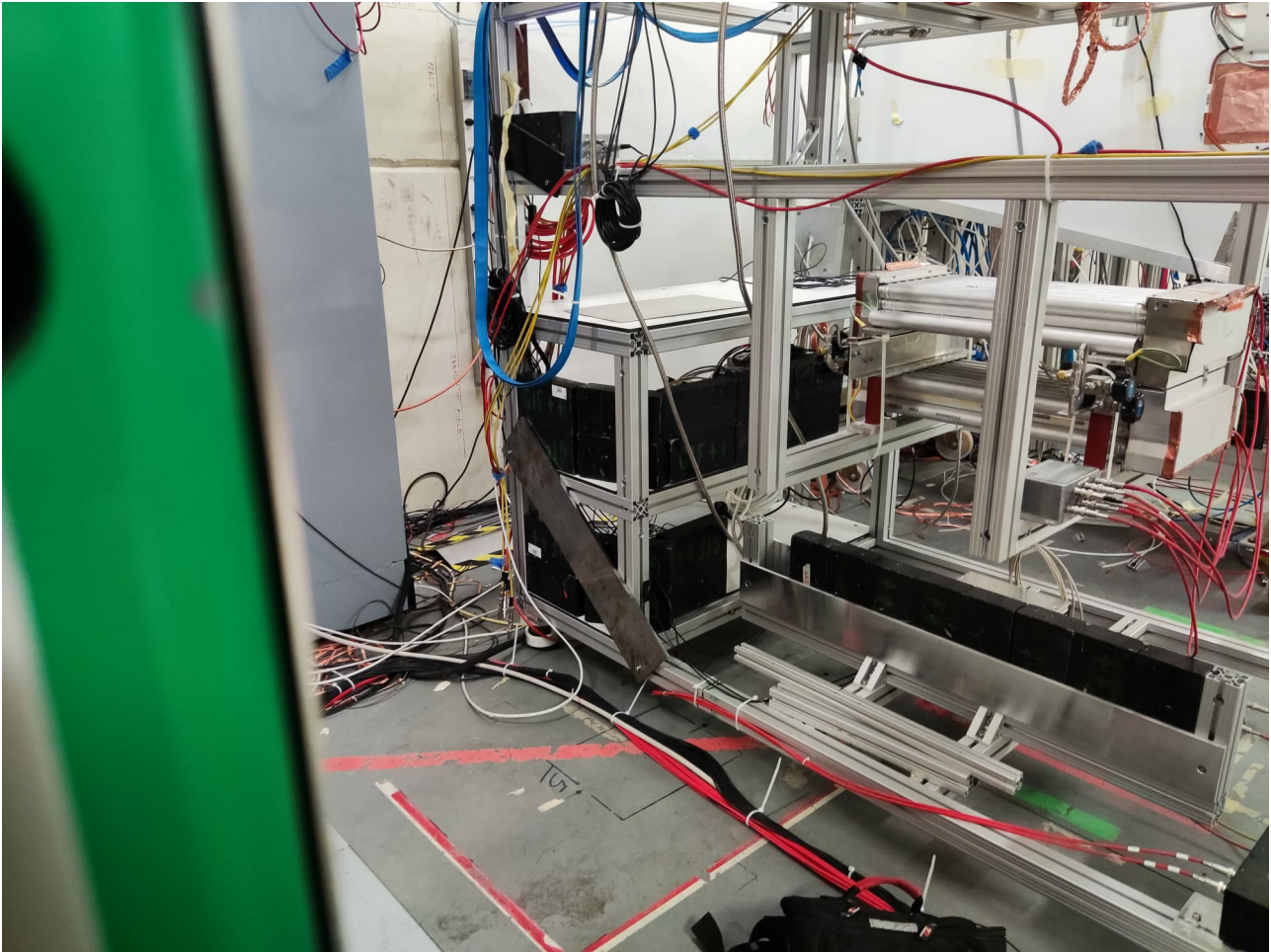
Planned Activities during next Test Beams:

- We'll stay outside the cone up to 4/5 (start of 2nd week of test beam)
- On 4/5 we'll go back to our position and GEM will be **MAIN USER OF THE SOURCE FOR 24H from 4/5 6am to 5/5 6am** (during machine development so no beam)
- No operation or requests from 5/5 to 11/5 (end of test beam)
- **MAIN USER OF THE SOURCE FOR 24H from 11/5 2pm to 12/5 2pm** we want to leave the morning for setup removal after test beam
- *No participation to May testbeam:* stup will be moved away from bunker
- Come back at GIF++ the 8/6 after testbeam

ATLAS-sMDT (Elena)

News from the previous week (31.03 - 07.04):

- The sMDT setup has been modified, additional platforms have been added to install the electronics inside the setup.
- The trolley with the sMDT electronics has been removed from the area between the irradiator and the wall.
- The electronics have been installed inside the setup.



Planned activities:

- The readout system (+ the whole electronics chain) of the detectors is expected to be restarted for mid of April.

ATL-sMDT beam time periods:

- week 17 : 25.04 - 03.05 - like a parasite for the updating and debugging of the DAQ and DCS systems
- week 20 : 18.05 - 24.05
- week 21 : 25.05 - 31.05
- week 22 : 01.06 - 07.06
- week 28/29 : 13.07 - 26.07
- week 42/43 : 19.10 - 01.11

Info of the setup for the TB periods:

Current ATLAS-sMDT setup will attend the test beam.

Setup dimension: 1m x 2m x 3m, no extra expansion of the setup planned for TB week 17.

Setup is housing multiple chambers with tube lengths up to 2m.

ProTOV

- No report this week. Currently off.
Need to find a new space for trolley.
Planned for next Wednesday.

EP-DT2: (Gianluca)

- No operation from Saturday due to lack of R-134a supply
- NIM crate problem: ventilation --> clean up required on create inside alcove (DONE)
- Test beam
 - Almost ready for the test beam: need to install the scintillators in next weeks.
 - We will participate to all the test beam with the setup already in the bunker. Probably the only exception will be the May test beam.

Ecogas: (Mapse, Luca, Gianluca)

- Weekly Planning:
 - RPCs are flushing with ecogas (60% CO₂, 35% HFO, 4% i-C₄H₁₀, 1% SF₆, GWP around 230)
 - Weekly Source off scans
 - Clean up campaign ongoing right now (pipes, cables on trolley 3)
- Test Beam:
 - We will participate in the July and October TB

CMS-RPC: (Mapse, Ece, Nicolas)

- Weekly Planning:

IRPC trolley is moved out of the bunker to the preparation area (last week).
We finished argon tests. We requested several slots with different abs (3.3,4.6,6.9) for the incoming week.
- Test Beam:

We would like to participate in all 8 weeks.
Week 20 would be low priority.
We would like to attend with 2 trolleys: Consolidation and tr3.

CMS-DT: (Lisa)

- weekly report:
 - moved chamber on the beam line this morning
 - filter scan performed this morning
 - ready for TB (we will participate but we have issues of manpower so we will see how to maximize data taking)
 - Test Beam:
 - we could profit from additional week 18
 - week 17 (from 25 April)
 - week 21 (from 25 May)
 - week 22 (from 01 June)
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Current minutes by the respective speakers, edited and commented by Martin & Giuseppe.
Minutes from previous meetings can be found attached to the respective Indico page as PDF.