

Weekly Reports - GIF++ Users Meeting

Meeting : 24.03.2022 - 9h

Announcements from GIF++ Coordination

- We expect a short GIF++ dedicated DSO test at the end of March.
- Gas supplies C₂H₂F₄(R134a), SF₆, CF₄, Ar+CO₂ (CMS-GEM, ATL-sMDT) restarted last THU as expected. So far no issue detected or reported.
- Calibration of the RP PMI + RP CHROME system updated yesterday.
- Next week, an inspection is foreseen on the hoists used for lifting the ATL-MM-NSW setup

Muon beam 2022 :

- Version 0.4 of schedule now available. NO changes affecting GIF++ so far (but still not final). No changes expected for the first 2 periods in the schedule.
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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 24/03/2022:

- Setup maintenance
 - survey in the gas zone for the installation of a pure Ar gas-line
 - a pure Ar gas line is also present in the gas zone
 - we could use the existing gas line in stainless steel for the Ar/CO₂/iC₄H₁₀ gas mixture also for the pure Ar (we will have all the gas flow rate, humidity sensor, etc.)
 - we could connect the pure Ar gas line to the Ar/CO₂/iC₄H₁₀ gas line through a 3-way valve (we could easily switch from Ar/CO₂/iC₄H₁₀ gas mixture to pure Ar and vice versa)
- Weekly plan:
 - continuation of aging studies with Ar/CO₂/iC₄H₁₀ gas mixture

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)

- Strong Malter currents in closed gas loop, investigating

CMS-GEM: (Davide, Michele, Ashok)

updated 24/03/2022

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

- Safety inspection on 23/03, some suggestions on grounding were implemented.
- Now ready for data taking
- Issue in communication with CAEN mainframe, no HV for now (ticket to IT created)
- As soon as we have the HV we would like to have an access (1h) to take a spectrum with 109Cd source, then half an hour of 46000 attenuation factor.

ATLAS-sMDT (Elena)

News from the previous week (17.03 - 24.03):

We performed some measurements in order to prepare the mechanical components for the platforms in order to install the electronics within the setup. The sMDT setup modification activity will be carried out during the next weekly access to the GIF ++ bunker.

During an unexpected power cut at the GIF++ facility on February 14, 2022, the following equipments have been damaged:

- the Baratron pressure sensor (in the gas rack)
- the computer system unit (it is DAQ PC in the electronics rack)

Planned activities:

- The electronics are planned to be installed inside the setup. This means that the trolley with electronics will completely remove from the area between the irradiator and the wall.
- The readout system (+ the whole electronics chain) of the detectors is expected to be restarted for end of March.

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: (Mattia)

- On Teamup, plan for long term measurements: every morning 9-12 with fixed upstream attenuation (Cycle: 22, 69, 10, 4.6), every Tuesday afternoon (14-17) fixed nominal attenuation 2.2 with one access (5 m) at the beginning and at the end of the measurements.
- Measurements foreseen for tomorrow are cancelled, thus everything will be postponed to Monday(21st), Tuesday(22nd) next week. Moreover, after next week measurements, there will be one week where no filter scan are planned.
- Test beam
 - 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 still flushed with Ar
 - ATLAS RPC reinstalled on the trolley in the bunker
- Test Beam:
 - We will participate in the July and October TB

CMS-RPC: (Mapse, Ece, Nicolas)

- Weekly Planning:

We cut the extra long profiles and move the trolley closer to EPDT trolley. Now the access distance is more than 110cm.

We will start data taking again on Wednesday.

We calculated our rate at the current position, it is 2.09 kHz at 2.2 abs exactly as we wanted to have. So we would like to stay at this abs factor. And we would like to keep the trolley until the test beam starts.

- 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 planning:
 - usual source scan today (ongoing)
 - continue irradiation at 2.2

- Test Beam:
 - week 17 (from 25 April)
 - week 21 (from 25 May)
 - week 22 (from 01 June)

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.