

# *MM Organization Issues*

## *Regular meetings of the NSW SG started*

- First meeting hold on Oct. 31<sup>st</sup>
- Planned weekly every Wednesday 4pm
- Eventually will comprises:
  - PL
  - deputy PL, MM
  - deputy PL, sTGC
  - Technical coordinator OR 2 separate roles: i) Services/service integration; ii) Mechanics/Layout
  - (Resource coordinator)
  - Alignment
  - Electronics
  - Controls and DCS
  - DAQ and Readout (higher level part, integration into TDAQ etc. when things proceed further)
  - Software (incl. simulation)
  - Trigger
  - Integration Activities, Logisitics
- Only PARTIALLY covered at present
- The list will certainly evolve with time

# IDENTIFICATION OF TASKS IN THE MM PROJECT

*As the NSW project is entering the Construction Phase, and moving to the new NSW management*

- It is crucial to have a complete view of the entire MM Project
- We need to identify the list of tasks in the project
- Assign tasks to people
- Guarantee that all tasks are covered in terms of manpower and proceed efficiently
- Assign coordination responsibilities
- Continuously monitor advances

*In the next two slides a proposed breakdown of tasks is reported.*

## MM TECHNICAL COORDINATOR

### DETECTOR CONSTRUCTION (Local Coordination at Construction Sites)

- Tooling
- Panels construction
- Mesh
- Frames
- Module Assembly
- On chamber in-plane sensors/ platforms

### QA/QC

#### QA/QC during CONSTRUCTION

- Selection of material/parts
- Gluing process, uniformity
- Panels certification: planarity, stiffness, strip alignment, gas tightness,
- Module Assembly/Module certification: HV, Gas tightness, X-rays
- Test-Stand

### DATABASE (Common Framework within NSW; Centralized across MM construction sites)

### Chamber Preparation at CERN

- Equipment of CERN commissioning area
- Read-out system(s)
- DAQ for testing
- Coordination of activities
- Wedge Assembly

### MM Project Engineer

#### Layout/ Drawings

- All MM building parts (panels, modules, Assembly/ Mounting ...)
- On chamber alignment
- Spacer(?)

#### Procurement

- All MM building parts (Boards, Glue, Frames, Honeycomb, ...)
- Mesh

### PCB Procurement

- Define a road-map with industries
- Complete Read-out PCB technology transfer and QA/QC
- Drift PCB
- Resistive strips
- Pillars

(\*) bulleted list as a guideline of items/activities to take care of

Tasks in red:  
Under MM Coordination

each box includes activities followed and developed by a defined list of people

<b>SERVICES</b> (Under NSW Coordination)	<b>Electronics</b> The group exists Is coordinated by Lorne		<b>DCS, DAQ and DQ/Monitoring</b> (Under NSW Coordination)	<b>Test-Beam Activity</b>	<b>Data Analysis</b>	<b>Muon Software</b>
<b>Power Supply HV/LV</b> (in connection with Industry)	<b>VMM and Companion Chips</b>	<b>TRIGGER</b> <ul style="list-style-type: none"> <li>• Design</li> <li>• Simulation</li> <li>• Implementation</li> <li>• MM+sTGC trigger combination</li> </ul>	<b>MM Controls</b> (HV/LV controls/monitor)	<ul style="list-style-type: none"> <li>• Small size prototype Magnetic Field &amp; Operational Conditions Optimization</li> <li>• Functional Prototypes</li> <li>• Module_0</li> <li>• Ageing – Radiation tests</li> </ul>	<ul style="list-style-type: none"> <li>• Test-beam analyses / Performance studies</li> <li>• Simulations and optimization of Operating Conditions</li> <li>• Definition of Calibration Constants</li> <li>• Reconstructi on method(s)</li> </ul>	<b>MM Specific SOFTWARE implementation in ATHENA</b> <ul style="list-style-type: none"> <li>• Geometry</li> <li>• Simulation/ Digitization</li> <li>• Reconstruction</li> <li>• Calibration</li> <li>• Database</li> </ul>
<b>Cooling</b>	<b>Front-end Boards</b>		<b>Sensors (B,T)</b>			
<b>Gas System</b>	<b>GBT Links</b>		<b>Alignment</b>			
<b>Cables/Pipes routing</b>	<b>cooling</b>		<b>DCS ATLAS Config/Init</b> <b>DCS Labs Config/Init</b>			
			<b>DAQ</b>			
		<b>Online/Offline Monitoring</b> Use of MSW as testbench to pilot DQ/Monitoring				

**Tasks in red:**  
**Under MM Coordination**

each box includes activities followed and developed by a defined list of people

# QUALIFICATION TASKS AND OTP

## Qualification task

- Qualification tasks should have a well defined scope
- The qualification duration is 1 year.
- A person qualifying is expected to spend a minimum of 50% of his free research time on the qualification task, and at minimum 80 full days during the 1 year qualification phase.
- so far students were already allowed to qualify fully on a upgrade task, while **for non students only 50% of the qualification task could be done on upgrade** (the rest had to be on an activity related to the present detector/software etc)
- the CB has been asked to approve a **change in this rule**, dropping the distinction between students/non students

## OTP

- No (good) news on OTP credits: cannot be assigned for upgrade activities

# THE MICROMEGAS COLLABORATION – INSTITUTES AND PEOPLE

*To ease work sharing/assignment/responsibilities we need to maintain an updated list of Institute/People working in the MM Project*

- List of Institutes/Funding Agencies
- Commitments in the MoU
- Current activities / expression of interests
- People / FTE
- ***MicroMegas Collaboration (MAMMA) Author List***

Country - FA	Institute	Commitment in the MoU	Activity	Number of People	FTE
...	...	...	...	...	...

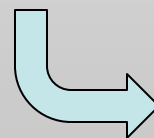
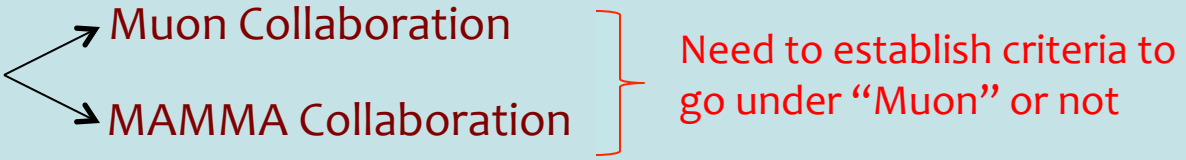
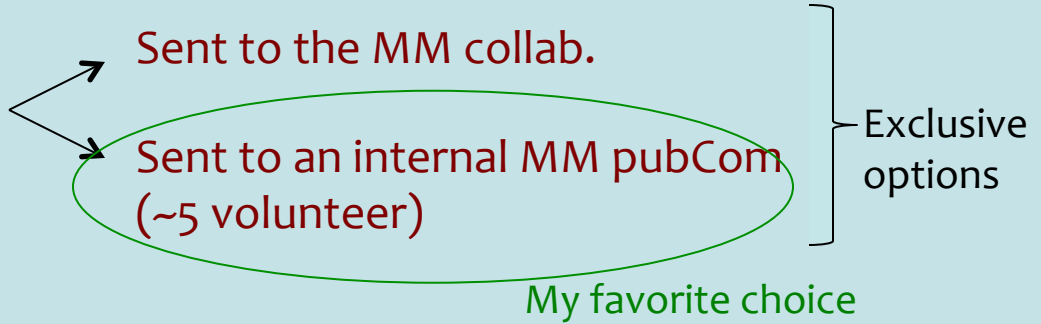


Table to be filled

## Presentations at Conferences

- Abstract should be collected and presented (listed) at the Weekly Meeting (WM)
- Presentation on behalf of 
  - Muon Collaboration
  - MAMMA Collaboration

Need to establish criteria to go under “Muon” or not
- Slides can only contain **MM approved plots/results**. Will be maintained on a dedicated Twiki. Results/Plots approval can be done with presentations at the WM
- In all cases slides must be prepared in time such that can be presented at the WM (rehearsal). In case of “Muon” talk then go through *Muon Speaker Comm.*
- Proceedings. Should be scrutinized 
  - Sent to the MM collab.
  - Sent to an internal MM pubCom (~5 volunteer)

Exclusive options

My favorite choice
- Author: in general the speaker  
“on behalf of...”



## *ATLAS Notes on specific topics under analysis/development*

- Focus on details of specific analyses/topics carried out by individuals or small groups. This is a way to report work in progress and to give visibility to people working on the subject (students, ... ). *The use of such ATLAS Notes is encouraged*
- Included content must be previously presented at the WM
- Should be scrutinized ... by the coordinator of the activity(?) ... by the “pub-com”(?)
- Typically short author list with only people directly involved in the topic

## *General ATLAS Notes (established results/procedures/developments)*

- Same procedure as for Proceedings
- Author list: Depending on the topic, under agreement of all coordinator of activities  
OR: Full MM author list

## *Journal Publications*

- Same procedure as for Proceedings
- Plus final scrutiny by the MM collaboration
- and follow “ATLAS”/”Muons” IF REQUESTED
- Author list: same as General Notes or more general if not only under MM

# DOCUMENTATION/COMMUNICATION CHANNELS

## Twiki Pages

- General NSW page (need revision/updates) :  
<https://twiki.cern.ch/twiki/bin/viewauth/Atlas/NewSmallWheel>
- From NSW to *MicroMegas* dedicated pages:  
<https://twiki.cern.ch/twiki/bin/viewauth/Atlas/MuonMicromegas>
  - Need clean-up/revision/possible restructuring following the list of tasks
  - All Work area should be accessible from the main page
  - Task coordinators or persons in charge, should manage and maintain their work area

## CDD (CERN Drawing Directory)

- Planned to be the common repository to manage reference drawings of all components of the NSW:  
[https://edms.cern.ch/cdd/plsql/c4w\\_atlas\\_guided.search?cookie=1595007&p\\_c\\_id=1912222064&p\\_project\\_code=ATU](https://edms.cern.ch/cdd/plsql/c4w_atlas_guided.search?cookie=1595007&p_c_id=1912222064&p_project_code=ATU)
- To provide an area to access temporary drawings the MM Mechanics dedicated twiki page is now used: <https://twiki.cern.ch/twiki/bin/viewauth/Atlas/MicroMegasMechanics>

## Documents

- NSW related documents of longterm interest, documentation, etc. will be stored in EDMS:  
<https://edms.cern.ch/nav/P:ATLAS:Vo/P:ATL-0000010222:Vo/TAB3>

Please select a sub-project :

<input type="radio"/>	ATUMH : Muon Support
<input checked="" type="radio"/>	ATUMHX : MicroMega Chambers Support
<input type="radio"/>	ATUMHT : sTGC Chambers Support
<input checked="" type="radio"/>	ATUMHS : NSW Global Structure
<input type="radio"/>	ATUMA : Projective Position Monitoring
<input type="radio"/>	ATUMM : MicroMega Chambers
<input type="radio"/>	ATUMT : sTGC Chambers

## *Meeting and Workshops*

- MM Weekly Meetings (Should ensure regular reports and exchange of information at all levels in the MM Project)
- Same time slot is reserved for 2014 Weekly meetings: every Tuesday at 16:00 in ROOM 40-R-C10 (with the exception of some Tuesdays)
- MM Mechanics Meetings
- MM General Meetings
- Meetings and Workshops in coordination with NSW (e.g. Layout/engineering/..)