

# News

- Meeting with CERN groups on Oct 15<sup>th</sup> :  
No real interest from CMS  
LHCb might be partner in 9.2 with their telescope  
ATLAS : H. Pernegger is organizing involvement in 9.2  
CERN/ATLAS (RD51) request for workshop equipment for  
MPGD : need to understand if this request is really supported by CERN management ....
- Simon Canfer in contact with JB Brom (CMS) & H. Pernegger for possible contribution of Diamond R&D in 8.3
- Message from RD51 project leader : need to answer (Hans/Valerio)
- Involvement of sLHC groups in 8.5 (Mar)

# RD51 message

Dear Hans-Gunther, Dear Valerio,

We are contacting you on behalf of several RD51 collaboration institutes who expressed a strong interest to participate in the WP3 of AIDA proposal "Microelectronics and detector/electronics integration". As you may know new developments in the field of CMOS readout (Timepix/Medipix2) for Micro-Pattern Gas Detectors (GEM, Micromegas) resulted in a significant boost of this technology and its potential applications - both for the HEP community (sLHC, ILC) and beyond it. However, in order to make the Timepix2 CMOS chip usable for gaseous detectors, common electronics infrastructure has to be developed:

- A multi-chip (64/128) readout system for Timepix-2 suited for high energy physics needs;
- Tools for large area ( $\sim 10 \times 10 \text{ cm}^2$ ) MPGD/Timepix2 construction, cooling, mechanics, 3D integration (including development of "in-via" connections for CMOS chips)
- In addition, several follow-up developments, which are important for the MPGD/CMOS readout, has to be started in the next few years: - 3D technology development together with optical chip-to-chip communication would be necessary to implement a 'system on chip' type of local processing and communication between neighbouring chips;
- 'Spark tolerant' 3D technology design.

With this mail we would like to ask you for a possibility to include item [WP 3.3 "CMOS Electronics for micro-pattern gaseous detectors"](#) into the WP3 list of the AIDA proposal.

The RD51 institutes would be willing to discuss with you an actual structure of the proposed WP3 activity and details of the proposal writing.

Thank you very much for your time and consideration ! Best regards, Leszek Ropelewski,  
Maxim Titov (on behalf of RD51 institutes:  
NIKHEF, Bonn, Saclay)

# RD51 message

My personal feeling :

- Would prefer to have link to experiments better than RDxx
- Can not afford such a “detector” specific task in WP3 network which is trying to make together communities. They can be partner in 8.2 if they are willing to benefit from CMOS MPW (3.2)
- Tools (mechanics, cooling..) should go to 9.3 if they believe this is worth (same are asking for the workshop upgrade)
- 3D : Can it fit partially in 3.1 ?

# Message from Mar

Task 8.4 is now including some User's infrastructure for GIF++. While I am heavily involved in the planning of this facility from the CERN side (together with my colleagues in CC of this email) I think it'd be great if a set of GIF++ users take on this task formally, and not CERN. We have serious trouble to get the user's commitment to provide in-kind contributions to the facility, though they have always expressed their support and intention to do so. AIDA task 8.2 (4?) will help them to materialize their wishes.

Below I provide two lists: i) of set of tasks that have been identified as possible in-kind contributions, and ii) some main GIF & GIF++ users that can be contacted by Hans, WP8 leader. I am available to provide details of all these potential contributions.

- i) User's infrastructure Scanning table for large area detectors Gas systems, Slow Controls System, Large areas cosmic ray set-up, Precise muon tracking set-up, Set of Radiation filters System for active gamma dose measurements
- ii) Some key players in GIF++ that could easily get involved in AIDA: George Mikenberg (ATLAS TGC, Weizmann Institute of Science, Israel), Rinaldo Santonico (ATLAS RPC, INFN, Roma), Giuseppe [iaselligiuseppe.iaselli@ba.infn.it](mailto:iaselligiuseppe.iaselli@ba.infn.it) (CMS RPC, INFN Bari), Hans Reithler [reithler@physik.rwth-aachen.de](mailto:reithler@physik.rwth-aachen.de) (CMS DT, Aachen), Sandro Palestini (ATLAS muons, CERN), INRNE Bulgaria, partner for Slow Controls when this task was in DevDet

# Proposal writing ...

Apart the WP packages (to be done by WP leaders), there are quite some other texts to write :

- Executive summary : 2.5 pages in DevDet (?)
- Concept & objectives : 2.5 pages (2)
- Progress beyond state of the art : 5.5 pages (description of sLHC, LC, B and neutrino factories) (4)
- S/T methodology and associated work plan : ~9 pages (?)  
contain structure of Work Packages, timing of Work Package, deliverables and milestones lists.
- WP description : should not exceed 4 pages ?
- Implementation / Management : 3 pages (<5)
- Individual participant : ~25 pages. Send template of find someone to compile it ? ½ page per Institute.
- Impact : ~3 pages
- Ethical Issues : a table
- Gender aspects : ½ page

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