



RD 51 Collaboration News

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80 RD51 Member Institutes; ~ 450 Participants



RD51 Collaboration Mini-Week, CERN Geneva, January 30, 2013

RD51 Collaboration Mini-Week (CERN, January 30- February 1, 2013):
<https://indico.cern.ch/conferenceOtherViews.py?view=standard&confId=229907>

Wednesday, January 30 (Bld. 30-7-018)

09:30 - 12:00 WG6 - Production

14:00 - 18:00 WG4 - Simulation & Software

Thursday, January 31 (Bld. 30-7-018)

09:00 – 12:00 WG1 MPGD Technologies and New Structures

14:00 - 17:00 WG2 – Physics Issues

Friday, February 1 (4-3-006 - TH Conference Room)

09:00 - 10:30 Collaboration Board Meeting

10:30 - 12:00 WG7- Test Beams

RD51 Collaboration Meetings in 2013 and Communications:

- **30 January – 1 February: RD51 Mini-Week (CERN)**
- **22 – 24 April: RD51 Mini-Week (CERN)**
- **5 - 6 July: RD51 Collaboration Meeting (Saragoza, Spain) – together with MPGD 2013 (1-4 July)**
- **14 – 16 October: RD51 Collaboration Meeting (CERN)**

RD51 Official Communications:

- **RD51 Collaboration Meetings Agenda:**
<http://rd51-public.web.cern.ch/RD51-Public/Meetings/CollaborationMeetings.html>
- **CB minutes:**
<https://espace.cern.ch/test-RD51/CB%20meeting%20minutes/Forms/AllItems.aspx>
- **MB minutes:**
<https://espace.cern.ch/test-RD51/MB%20meetings/Forms/AllItems.aspx>

RD51 Collaboration Notes

<https://espace.cern.ch/test-RD51/RD51%20internal%20notes/Forms/AllItems.aspx>

RD51 INTERNAL NOTES

2011

RD51-Note-2011-017 - "Transport properties of operational gas mixtures used at LHC" (by Y. Assran, A. Sharma)

RD51-Note-2011-016 - "THGEM-based detectors for sampling elements in DHCAL: laboratory and beam evaluation" (by L. Arazi, H. Natal da Luz, D. Freytag, M. Pitt, C. D. R. Azevedo, A. Rubin, M. Cortesi, D. S. Covita, C. A. B. Oliveira, E. Oliveri, R. Herbst, S. Park, J. Yu, R. Chechik, J. M. F. dos Santos, M. Breidenbach, G. Haller, A. White, J. F. C. A. Veloso, A. Breskin)

RD51-Note-2011-015 - "Detection and removal of short circuits from GEM foils" (by M. Kalliokoski, T. Hildén, R. Lauhakangas, P. Karppinen, T. Karppinen, R. Turpeinen, F. Garcia, J. Heino and E. Tuominen)

RD51-Note-2011-014 - "Optical Scanning System for Quality Control of GEM foils" (by M. Kalliokoski, T. Hilden, F. Garcia, J. Helino, R. Lauhakangas, E. Tuominen and R. Turpeinen)

RD51-Note-2011-013 - "Test beam results of the GE1/upgrade of the CMS high-eta muon system" (by D. Abbar, Armagnaud, P. Aspell, Y. Ban, S. Bally, L. Benussi, U. Ben-Bunkowski, J. Cai, J. P. Chatelain, J. Christiansen, S. Cola-Garcia, E. David, G. de Robertis, R. De Oliveira, S. Duarte-Franconi, K. Gnanvo, A. Gutierrez, M. Hohlmann, P. E. K. Maggi, A. Marchioro, A. Marinov, K. Mehta, J. Merlin, A. Nemallapudi, S. Nuzzo, E. Oliveri, D. Piccolo, H. Postema, Ropelewski, G. Saviano, A. Sharma, M. J. Staib, H. Teng, Turini, N. Smiljkovic, M. Villa, N. Zaganidis, M. Zientek)

RD51-Note-2011-012 - "Construction and Performance Prototypes for Future Upgrades of the CMS Forward Muon Marinos, N. Zaganidis, Y. Ban, J. Cai, H. Teng, A. Mohapatra, Colaleo, G. de Robertis, F. Loddio, M. Maggi, S. Nuzzo, S. Bianco, S. Colafranceschi, D. Piccolo, G. Raffone, G. Saviano, Turini, T. Fruboes, D. Abbaneo, C. Armagnaud, P. Aspell, Bunkowski, J. P. Chatelain, J. Christiansen, A. Conde-Garcia, Duarte Pinto, S. Ferry, F. Formenti, L. Franconi, A. March, Nemallapudi, H. Postema, A. Rodrigues, L. Ropelewski, A. Sharma, N. Smiljkovic, M. Villa, M. Zientek, A. Gutierrez, P. E. Karchin, K. Gnanvo, M. Hohlmann, M. J. Staib)

RD51-Note-2011-011 - "A Slow Control System for RD51 Test Facilities", (by K. Karakostas, T. Alexopoulos, G. Tsipolitis)

RD51-Note-2011-010 - "Signal propagation and spark mitigation in resistive strips read-outs" (by J. Galan)

RD51-Note-2011-009 - "Innovative designs of resistive microstrip gaseous detectors (R-MSGCs)" (by P. Martinengo, E. Nappi, R. Oliveira, V. Peskov, P. Pietropaolo, P. Picchi)

RD51-Note-2011-008 - "An improved design of spark-protected microstrip gas counters (R-MSGC)" (by R. Oliveira, V. Peskov, F. Pietropaolo, P. Picchi)

RD51-Note-2011-007 - "First observation of Cherenkov rings with a large area CsI-TGEM-based RICH prototype" (by V. Peskov, G. Bencze, A. Di Mauro, P. Martinengo, D. Mayani, L. Molnar, E. Nappi, G. Paic, N. Smirnov, H. Anand, I. Shukla)

RD51-Note-2011-006 - "On the low-temperature performances of THGEM and THGEM/G-APD multipliers in gaseous and two-phase Xe" (by A. Bondar, A. Buzulutskov, A. Grebenuk, E. Shemyakina, A. Sokolov, D. Akimov, I. Alexandrov and A. Breskin)

RD51-Note-2011-005 - "Modelling of avalanches and streamers by finite elements with COMSOL: step-by-step guide", Notes for the RD51 Simulation School, CERN, Jan. 19-21 2011, (by P. Fonte)

RD51-Note-2011-004 - "Thermal Stretching of Large-Area GEM Foils Using an Infrared Heating Method" (by Michael Staib, Bryant Benson, Kondo Gnanvo, Marcus Hohlmann, Amilkar Quintero)

RD51-Note-2011-003 - "On the operation of a Micropattern Gaseous UV Photomultiplier in Liquid-Xenon" (by S. Duval, A. Breskin, R. Budnik, W.T. Chen, H. Carduner, M. Cortesi, J.P. Cussonneau , J. Donnard, J. Lamblin, P. Le Ray, E. Morteau, T. Oger, J.S. Stutzmann and D. Thers)

red scintillation yield in gaseous and liquid argon for rare-
Buzulutskov, A. Bondar, A. Grebenuk)

ther Developments and Tests of Microstrip Gas Counters
Oliveira, V. Peskov, Pietropaolo, P. Picchi).

2010

RD51-Note-2010-007 - "Flow Simulations for gaseous detectors" (by D. Abbaneo, Garcia, J. P. Chatelain, G. Faber, L. Ropelewski, S. Duarte Pinto, A. Van Stenis, A. Sharma, L. Benussi, S. Bianco, S. Isamonti, D. Piccolo, D. Pierluigi, A. Russo, G. Saviano, A. T. E. Oliveri, G. Magazzù, Y. Ban, H. Teng, J. Cai)

RD51-Note-2010-006 - "Construction of the first full-size GEM-based prototype for the CMS Muon Detection System" (by D. Abbaneo, S. Bally, H. Postema, A. Conde Garcia, J. P. Skarpi, S. Duarte Pinto, G. Croci, M. Alfonsi, M. Van Stenis, A. S. Colafranceschi, F. Fabbri, L. Passamonti, D. Piccolo, D. Pierluigi, G. Saviano, A. Marinov, M. Tytgat, N. Zaganidis, M. Hohlmann, K. Gnanvo, M.G. Bagliesi, R. Cecchi, N. Turini, E. Oliveri, G. Magazzù, Y. Ban, H. Teng, J. Cai)

RD51-Note-2010-007 - "First tests of "bulk" MICROMEGAS with resistive cathode mesh" (by R. Oliveira, V. Peskov, Pietropaolo, P. Picchi)

RD51-Note-2010-006 - "A spark-resistant bulk-micromegas chamber for high-rate applications" (by T. Alexopoulos, J. Burnens, R. de Oliveira, G. Glonti, O. Pizzirusso, V. Polychronakos, G. Sekhniaidze, G. Tsipolitis, J. Wotschack)

RD51-Note-2010-005 - "Characterization of GEM Detectors for Application in the CMS Muon Detection System" (by D. Abbaneo, S. Bally, H. Postema, A. Conde Garcia, J. P. Chatelain, G. Faber, L. Ropelewski, E. David, S. Duarte Pinto, G. Croci, M. Alfonsi, M. Van Stenis, A. Sharma, L. Benussi, S. Bianco, S. Colafranceschi, D. Piccolo, G. Saviano, N.

We encourage everybody to submit results of your work (before journal publication) and internal documentation as RD51 internal notes

WG5 – Electronics & Scalable Readout Systems

Legal documents required for SRS distribution to the RD51 institutes are finalized

Caveat: situation only resolved for countries, which does not require license, based on “Commerce Control List” (cat. NS2) – mostly Europe, Switzerland & few others

Institute Name
[Street Address] • [City], [Postal Code]
Phone: [Your Phone] • Fax: [Your Fax] • E-Mail: [Your E-Mail]
Web: [Web Address]

Date: [Insert Date]

CERN
The European Organization for Nuclear Research
Attention: Philippe Farthouat
Co: Alessandro Marchioro
PH-ESE
CH 1211 Geneva 23
Switzerland

SUBJECT: Letter of Compliance Concerning Deep-Submicron Technology Circuits

Dear Sirs,

As an authorized representative of [Institute Name], I herewith confirm that [Institute Name] understands and agrees to comply with the provisions listed hereunder governing any and all integrated circuits manufactured in Deep-Submicron technology and made available to us by or on behalf of CERN (“the circuits”):

(1) Notwithstanding any other agreement or understanding entered into by [Institute Name], The [Institute Name] assumes responsibility in full for any loss, damage, fine or penalty incurred as a result of its failure to comply with these provisions;

(2) The [Institute Name] shall use the circuits exclusively for scientific research purposes and shall not transfer or (re)sell them for any other purpose;

(3) The [Institute Name] shall not cause the circuits to meet or exceed all (that is, cumulative) five of the following characteristics:

- (a) a total dose of 5×10^5 Rads (Si);
- (b) a dose rate upset threshold of 5×10^3 Rads (Si)/sec;
- (c) a neutron dose of 1×10^{14} n/cm² (1 MeV equivalent);
- (d) a single event upset rate of 1×10^{-10} errors/bit-day or less, for the CRBME96 geosynchronous orbit, Solar Minimum Environment;
- (e) single event latch-up free and having a dose rate latch-up threshold of 5×10^3 Rads (Si).

SRS Distribution Procedure;

- Every institute has to sign “Letter of Compliance” with RD51 spokes and send original to A. Marchioro
- Order your SRS systems/hybrids from CERN Store
- Pick-up hybrids from A. Marchioro office ([PH-ESE-ME, 77319](#))

More News:

- Extension of Gas Detector Laboratory (PH-DT Department)
- Tech-Etc (USA) is on the way to sign the license agreement With CERN

COLLABORATION BOARD MEETING, FEBRUARY 1, 09:00:

1. Decisions concerning the common projects submitted in 2012
2. Update about the procedure for the RD51 prolongation
3. Presentation of the new Institutes and vote about.
4. AOB