

News from the LHC Committee

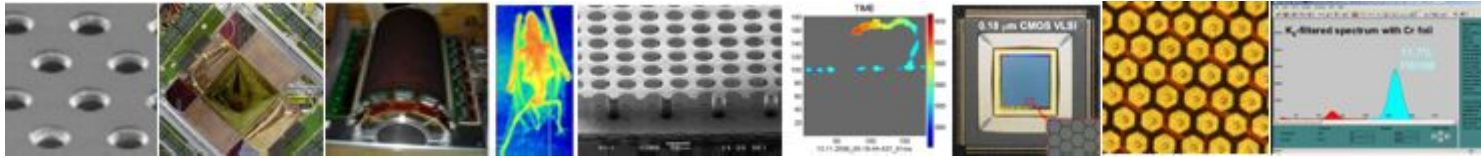
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RD51 Collaboration status

Leszek Ropelewski CERN-PH

RD51 Collaboration status

- CERN MPGD workshop (10-11 September 2007)
[Micro Pattern Gas Detectors. Towards an R&D Collaboration. \(10-11 September 2007\)](#)
- 1st draft of the proposal presentation during Nikhef meeting (17 April 2008))
[Micro-Pattern Gas Detectors \(RD-51\) Workshop, Nikhef, April 16-18, 2008](#)
[Gas detectors advance into a second century - CERN Courier](#)
- Collaboration and Management Board meetings in Amsterdam (17-18 April 2008)
- Conveners and Management Board meetings (10+15)
- Proposal sent to CB members (23 June 2008)
- Proposal presentation in LHCC open session (2 July 2008)
[94th LHCC Meeting Agenda \(02-03 July 2008\)](#)
[CERN-LHCC-2008-011 \(LHCC-P-011\)](#)
- Meeting with LHCC referees (23 September 2008)
[Meeting with LHCC referees \(23 September 2008\)](#)
- LHCC meeting closed session (24 September 2008)
- LHCC recommendation to CERN Research Board (5 December 2008))
- Memorandum of Understanding (final version before end of year and signing before next Collaboration meeting in Crete)



R&D Proposal

Development of Micro-Pattern Gas Detector Technologies

Leszek Ropelewski (CERN) & Maxim Titov (CEA Saclay)

94th LHCC Committee Meeting, July 2 2008

MPGD Collaboration

Alessandria, Italy, Dipartimento di Scienze e Technologie Avanzate, Universita del Piemonte Orientale and INFN sezione Torino

Amsterdam, Netherlands, Nikhef

Annecy-le-Vieux, France, Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP)

Argonne, USA, High Energy Physics Division, Argonne National Laboratory

Arlington, USA, Department of Physics, University of Texas

Athens, Greece, Department of Nuclear and Elementary Particle Physics, University of Athens

Athens, Greece, Institute of Nuclear Physics, National Centre for Science Research "Demokritos"

Athens, Greece, Physics Department, National Technical University of Athens

Aveiro, Portugal, Departamento de Fisica, Universidade de Aveiro

Barcelona, Spain, Institut de Fisica d'Altes Energies (IFAE), Universitat Autònoma de Barcelona

Bari, Italy, Dipartimento Interateneo di Fisica dell'Universita and sezione INFN

Bonn, Germany, Physikalisches Institut, Rheinische Friedrich-Wilhelms Universität

Braunschweig, Germany, Physikalisches Technische Bundesanstalt

Budapest, Hungary, Institute of Physics, Eötvös Loránd University

Budapest, Hungary, KFKI Research Institute for Particle and Nuclear Physics, Hungarian Academy of Sciences

Bursa, Turkey, Institute for Natural and Applied Sciences, Uludag University

Cagliari, Italy, Dipartimento di Fisica dell'Universita and sezione INFN

Coimbra, Portugal, Departamento de Fisica, Universidade de Coimbra

Coimbra, Portugal, Laboratorio de Instrumentacao e Fisica Experimental de Particulas

Columbia, USA, Department of Physics and Astronomy, University of South Carolina

Frascati, Italy, Laboratori Nazionale di Frascati, INFN

Freiburg, Germany, Physikalisches Institut, Albert-Ludwigs Universität

Geneva, Switzerland, CERN

Geneva, Switzerland, Département de Physique Nucléaire et Corpusculaire, Université de Genève

Grenoble, France, Laboratoire de Physique Subatomique et de Cosmologie (LPSC)

Hefei, China, University of Science and Technology of China

Helsinki, Finland, Helsinki Institute of Physics

Kolkata, India, Saha Institute of Nuclear Physics

Lanzhou, China, School of Nuclear Science and Technology, Lanzhou University

Melbourne, USA, Department of Physics and Space Science, Florida Institute of Technology

Mexico City, Mexico, Instituto de Ciencias Nucleares, Universidad Nacional Autónoma de México

Montreal, Canada, Département de physique, Université de Montréal

Mumbai, India, Tata Institute of Fundamental Research, Department of Astronomy & Astrophysics

München, Germany, Physik Department, Technische Universität

München, Germany, Max Planck Institut für Physik

Naples, Italy, Dipartimento di Scienze Fisiche dell'Universita and sezione INFN

New Haven, USA, Department of Physics, Yale University

Novara, Italy, TERA Foundation

Novosibirsk, Russia, Budker Institute of Nuclear Physics

Ottawa, Canada, Department of Physics, Carleton University

Rehovot, Israel, Radiation Detection Physics Laboratory, The Weizmann Institute of Sciences

Rome, Italy, INFN Sezione di Roma, gruppo Sanità and Istituto Superiore di Sanità

Saclay, France, Institut de recherche sur les lois fondamentales de l'Univers, CEA

Sheffield, Great Britain, Physics Department, University of Sheffield

Siena, Italy, Dipartimento di Fisica dell'Universita and INFN Sezione di Pisa

St Etienne, France, Ecole Nationale Supérieure des Mines

St Petersburg, Russia, St Petersburg Nuclear Physics Institute

Thessaloniki, Greece, Physics Department Aristotle University of Thessaloniki

Trieste, Italy, Dipartimento di Fisica dell'Universita and Sezione INFN

Tucson, USA, Department of Physics, University of Arizona

Tunis, Tunisia, Centre Nationale des Sciences et Technologies Nucléaire

Upton, USA, Brookhaven National Laboratory

Valencia, Spain, Instituto de Fisica Corpuscular

Valencia, Spain, Universidad Politécnica

Zaragoza, Spain, Laboratorio de Física Nuclear y Astropartículas, Universidad de Zaragoza

285 authors from 54 Institutes from 20 countries and 4 continents

RD51 – Micropattern Gas Detectors

		WG1 MPGD Technology & New Structures	WG2 Characterization	WG3 Applications	WG4 Software & Simulation	WG5 Electronics	WG6 Production	WG7 Common Test Facilities
Objectives	Design optimization	Development of new geometries and techniques	Common test standards	Evaluation and optimization for specific applications	Development of common software and documentation for MPGD simulations	Readout electronics optimization and integration with MPGD detectors	Development of cost-effective technologies and industrialization	Sharing of common infrastructure for detector characterization
	Development of new geometries and techniques		Characterization and understanding of physical phenomena in MPGD					
Tasks	Large Area MPGDs	Common Test Standards	Tracking and Triggering	Photon Detection	Algorithms	FE electronics requirements definition	Common Production Facility	Testbeam Facility
	Design Optimization New Geometries Fabrication		Discharge Protection					
	Development of Rad-Hard Detectors	Ageing & Radiation Hardness	Cryogenic Detectors	Common Platform (Root, Geant4)	Large Area Systems with Pixel Readout	Industrialization		
	Development of Portable Detectors	Charging up and Rate Capability	X-Ray and Neutron Imaging		Astroparticle Physics Appl.		Portable Multi-Channel System	
	Study of Avalanche Statistics	Medical Applications	Electronics Modeling	Discharge Protection Strategies	Collaboration with Industrial Partners	Irradiation Facility		
		Synchrotron Rad. Plasma Diagn. Homeland Sec.						

Proposal presentation in LHCC open session (2 July 2008)

Dear Leszek and Maxim,

As I told Leszek verbally, the initial response of the committee members to your proposal presented at the open session of the LHCC was favourable and two members of the committee Wolfgang Kühn and Bernard Peyaud have agreed to serve as lead referees in our consideration of the proposal to form the RD51 collaboration to coordinate R&D into Micro-Pattern Gas Detector Technologies.

Wolfgang and Bernard will coordinate the collection of questions from the committee and arrange to meet with you before our September LHCC meeting, with a view to making a report in the closed session and (if appropriate) making a recommendation on acceptance of the proposal.

Regards, Terry.

LHCC meeting closed session (24 September 2008)

Dear Maxim and Leszek,

The committee received very favourably the report from the referees (Wolfgang Kühn and Bernard Peyaud). It was agreed that on behalf of the LHCC I should recommend acceptance of your proposal to the next research board. (This has been rescheduled for 5th December, so you have a little more time to wait for an official decision). Thanks again for a well prepared and thought out proposal.

Regards, Terry.