

PERSONAL INFORMATION

Dr. Rer. Nat. Florin MACIUC



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Sex Male | Date of birth 24/09/1975 | Nationality Romanian

POSITION WITHIN THE PROJECT

Project director/manager and LHCb-Romania Team Leader

WORK EXPERIENCE

From 8.06.2012 to present

Researcher and Project Director

at IFIN-HH with tasks:

1. LHCb activities of data analysis, PhD and Master student coordinator at IFIN-HH, and other research tasks, including outreach and technical expertise;
2. Management of the Institute of Atomic Physics, project CERN-RO No 7/16.03.2016.
3. Management of PN-II-ID-PCE-2011-3-0749 project contract 56/07.10.2011, title "Studies of Flavour Production Mechanisms in the pp Interaction" <http://www.nipne.ro/dpp/Collab/LHCb/idei/index.html> since May 2013 to December 2016;
4. Management of PN-II project for Romania-CERN „Capacitati Modulul III” contract no. 03/03.01.2012, title "LHCb - from strangeness to b hadron physics and beyond"
5. Activities within DFPE Department from IFIN-HH;
6. Team Leader and LHCb Collaboration Board Representative from IFIN-HH

From 1.01.2011 to 8.06.2012

Guest Researcher

Max Planck Institut fuer Kernphysik Heidelberg:

1. LHCb activities of data analysis
2. LHCb technical and computing and Monte Carlo work

From 1.11.2009 to 31.12.2010

Post-Doctoral fellowship

Max Planck Institut fuer Kernphysik Heidelberg:

1. Work on LHCb data analysis;
2. Technical aspects of LHCb Inner Tracker software alignment.

From 1.04.2009 to 31.10.2009

Guest Researcher

Max Planck Institut fuer Kernphysik Heidelberg

1. Implementing the Alignment of LHCb Inner Tracker using tracks from LHCb early data and Monte Carlo samples.

WORK EXPERIENCE

- From 1.02.2005 to 31.03.2009 **Employment at Max-Planck-Institut fuer Kernphysik (MPI-K) with Max Planck Society [doctoral fellowship](#) with involvement in:**
1. Hera-B collaboration and CosmoALEPH in data analyses
 2. MPI-K Hera-B Cluster and Hera-B software administrative tasks
 3. LHCb analyses and LHCb Inner Tracking alignment task – method, algorithm development and implementation.
 4. Teaching assignment for one full academic year - Advance Laboratory classes: "Stossionisation von Atomen" –or atomic ionization with electron collisions.
- From 1.07.2001 to 10.12.2001 **Researcher**
- Rutherford Appleton Laboratory with partial coverage from a DAAD scholarship.
- Tasks: 1. SNO data analysis and Monte Carlo simulation
2. Pattern recognition testing
- From 1.12.2000 to 31.11.2004 **Research assistant and scholarship**
- Siegen University Germany - several months-spanning contracts and scholarships, in parallel with preparation for "Diplom Physiker" grade,
Tasks: CosmoALEPH data analysis and Monte Carlo studies.

 EDUCATION AND TRAINING

- From 1.11.2009 to 31.12.2010 **Post Doctorat fellowship** Level 8
Max-Planck-Institut fuer Kenphysik Heidelberg and LHCb
High Energy Physics and Experimental Physics
- From 1.02.2005 to 20.04.2009 **Doctor of science - Doctor rerum naturalium** Level 8
Ruprecht-Karls-Universität Heidelberg
High Energy Physics and Experimental Physics
- From 1.12.2000 to 26.08.2004 **Diplom Physiker** Level 7
Astrophysics and High Energy Physics
- From 1.010.1999 to 31.09.2000 **"Diploma de studii aprofundate"**
University "Politehnica" Bucharest - Computing and Lasers
- From 1.10.1994 to 31.09.1999 **Physics Engineer Diplom**
University "Politehnica" Bucharest - Physics

Exchange student “Rijksuniversiteit” University of Groningen, Netherlands, “Ecole Polytechnique” Paris, France, “European Mobility Scheme for Physics Students” with Tempus grant, plus International Program coverage through X.

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B2	B2	B2	B2	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

Extended international experience abroad, communicating with various academic and students from all over the globe and from a plethora of cultures.
 Knowledge on a large range of physics subjects experimental/theoretical/applied: high energy, astrophysics, theoretical quantum field, lasers, nuclear, mathematic-physics, condense matter, etc.
 Extensive experience in reporting and advertising scientific results. Outreach activities for high energy physics community.
 Extensive experience with various administrative systems.

Organisational / managerial skills

- LHCb-Ro Project, management of IFA’s CERN-RO project 7/16.03.2016, with 1.217.622,33 EURO (BNR exchange rate from 16.03.2016)
- Administrating and Managing director two other projects funded with a 1.5 million EURO budget for 2012-2016.
- Team Leader for 20 members in LHCb-Romania group.
- Responsible with more than 8 irradiation tests concluded at Juelich, CERN/CHARM, PSI, Legnaro, Louvain, Padova (3 chips of distinct types, various sources of radiation), teams of 5-7 persons plus host staff and international partners.
- Responsible of 5 Nucleus Project Phases/Reports for DFPE, 2015-2017 and 2 in 2018, the latter ongoing. About 500k EURO.

Job-related skills

Experience with: experimental data processing and analysis methods, calculus, statistical methods, computation methods, team management, resource allocation.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- Excellent abilities on physics analyses framework, developer of LHCb software algorithms;
- Extended experience with implementing computing and simulation modules for various physics analyses, reconstruction and simulation projects including LHCb projects.

ADDITIONAL INFORMATION

Other skills History, Astronomy, mathematics, electronics.

ANNEXES

Publications

Examples

[Study of the production of \$\Lambda_b^0\$ and \$B_0\$ hadrons in pp collisions and first measurement of the \$\Lambda_b^0 \rightarrow J/\psi K^-\$ branching fraction observation of the \$B_0 \rightarrow J/\psi \phi \phi\$ decay](#) Chinese Physics C Vol. 40

[QCD and Electroweak Boson Production in the Forward Region in LHCb](#) Open Physics Journal 2014

[Muon-Pair Production by Atmospheric Muons in CosmoALEPH](#) Phys. Rev. Lett. 96,

[Tracking and alignment in LHCb.](#) DESY-PROC-2010-001

[Rate equations for an erbium laser system: a numerical approach](#) SPIE Proceedings Vol. 4430

Co-authored 431 LHCb papers

CERN Documents

EDR for PDMDB for LHCb RICH subdetector
PRR for PDMDB
Co-authored LHCb Collaboration TDRs

Projects

Director of IDEI project 2013-2016 for PNCDI II, "IDEI" Program, project PN-II-ID-PCE-2011-3-0749; contract no. 56/07.10.2011;

Director of project PNCDI III, Module CERN-RO, Program 5, Subprogram 5.2 LHCb-Ro project contract no. 7/16.03.2016

Director of project PNCDI II, Module III: Capacități, RO-CERN: LHCb; contract no. 3/03.01.2012 (2013-2015)

LHCb public and internal talks

More than 127 talks in LHCb Collaboration meetings and workshops

- Hirsch index of 48 from Web of Science and h-HEP of 79 from INSPIRE
 - copies of degrees and qualifications are available on demand;
 - testimonial of employment or work placement;
- Full list of publication of Dr. Rer. Nat. Florin MACIUC available on demand
A publication list of LHCb papers co-authored is available from LHCb official site
http://lhcbproject.web.cern.ch/lhcbproject/Publications/LHCbProjectPublic/Summary_all.html
plus the non LHCb papers, most retrievable from <http://inspirehep.net/author/profile/F.Maciuc.1> .