MAURO EMANUELE DINARDO: CURRICULUM VITÆ ET STUDIORUM

PERSONAL DATA

Name: Mauro Emanuele
Surname: Dinardo
Date of birth: May 1st, 1977
Citizenship: Italian

PRESENT ADDRESS

Physics Department "G. Occhialini"
Università degli Studi di Milano-Bicocca
Piazza della Scienza 3, Edificio U2
20126 - Milano (Italy)
Office phone: +39-02-6448-2427
Email: mauro.dinardo@cern.ch

CURRENT POSITION

2017-now   Associate professor at Università degli Studi di Milano-Bicocca (Italy).

EDUCATION AND CAREER

2013-2016   Tenure-track at Università degli Studi di Milano-Bicocca.

2012   Associate Project Scientist at the University of California-Riverside (USA).
Supervisor: Prof. Gail Hanson.

2006-2011   Research Associate at the University of Colorado-Boulder (USA).
Supervisor: Prof.s John P. Cumalat and Kevin Stenson.

December 2005 Ph.D. in *"Physics, Astrophysics and Applied Physics"* at Università degli Studi di Milano (Italy).
Supervisor: Dr. Luigi Moroni.
Thesis title: *"A new micro-strip tracker for the new generation of experiments at hadron colliders."*

November 2002 First classified at the competitive selection to access the Ph.D. program in *"Physics, Astrophysics and Applied Physics"* at Università degli Studi di Milano.

October 2002   Laurea in Electronics Engineering from both Politecnico di Milano (Italy), grade 100/100 *cum laude*, and École Supérieure d'Électricité-Supélec (Gif sur Yvette-Paris, France).
Supervisor: Prof. Lucio Braicovich.
Thesis title: *"New photon polarisation effects in the resonant inelastic X-rays scattering from Cerium compounds."*

1996-2001   Attended electronics engineering courses, specialising in math and physics, both at Politecnico and Supélec, within the student exchange program *"Erasmus*

T.I.M.E. - The Top Industrial Managers for Europe," http://www.polimi.it/studenti/esperienze-allestero/mobilita-per-studio/doppie-lauree/progetto-time/

1991-1996 Scientific high-school in computer science (Bergamo, Italy), grade 60/60.

CAPABILITIES OF ATTRACTING FUNDINGS

2014-2017 **53 k€** from the Italian National Institute for Nuclear Research - INFN for the sub-project *"Development of large area polycrystalline Diamond dosimeters,"* within the IMRT (Intensity Modulated Radiation Therapy) project.

2013-2016 **83 k€** from the *"program for young researchers - Rita Levi Montalcini"* for the project *"A novel pixel detector based on Diamond for high energy physics at future hadron colliders."*

LEADERSHIP ROLES

2015-2017 **4 people team:** leading role in the measurement of the angular parameters of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$.

2015-now **5 people team:** responsible for testbeam activities, data analysis, and sensor irradiation within the joint ATLAS-CMS INFN project for the development of new pixel sensors for the second CMS upgrade.

2014-2017 **3 people team:** responsible of the Milano-Bicocca group involved in the INFN project *"Development of large area polycrystalline Diamond dosimeters."*

2013-2016 **8 people team:** responsible for the maintenance, re-commissioning, and operation of the CMS pixel detector.

2009 **6 people team:** responsible for the maintenance, repair, and performance improvement of the CMS forward pixel detector.

2007-2008 **8 people team:** responsible for the commissioning and installation of the CMS forward pixel detector.

TEACHING / SEMINARS / REFEREE

2017-now Teacher of *"Laboratory II: C++ programming and data analysis"* for the physics faculty at Università degli Studi di Milano-Bicocca.

2016-2017   Referee of the Muon Forward Tracker ladder project for the Alice experiment at CERN (engineering design and product readiness reviews).

March 2014   Invited talk "$B^0 \rightarrow K^{*0} \mu^+ \mu^-$ analysis in CMS" at the Imperial College London for the HEP seminars.

2013-now   Teacher of *"Laboratory II: electromagnetism and optics lab"* for the physics faculty at Università degli Studi di Milano-Bicocca.

February 2011   Tutor at the hands-on session on hybrid pixel detectors at the CERN school *"Excellence in Detectors and Instrumentation Technologies-EDIT 2011."* https://edit2011.web.cern.ch/edit2011/ and https://mmoll.web.cern.ch/mmoll/edit2011/

2008-now   Conference proceeding referee for the following conferences:
* *"Symposium on the Development and Application of Semiconductor Tracking Detectors"* [A4]
* *"International Workshop on Semiconductor Pixel Detectors for Particles and Imaging"* [A2-3]
* *"International Workshop on Vertex Detectors"* [A1]

SCHOLARSHIPS AND AWARDS

August 2015   CMS *"Frontier Science Result"* recognition for the *"Angular analysis of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ from pp collisions at sqrt(s) = 8 TeV."* http://www.fnal.gov/pub/today/archive_2015/today15-10-28.html

November 2013   Won the Italian nation-wide competition for the eligibility to an associate professorship position *"Abilitazione Scientifica Nazionale."* https://abilitazione.cineca.it/ministero.php/public/esitoAbilitati/settore/02%252FA1/fascia/2

October 2013   CMS *"Frontier Science Result"* recognition for the *"Angular analysis and branching fraction measurement of the decay $B^0 \rightarrow K^{*0} \mu^+ \mu^-$."* http://www.fnal.gov/pub/today/archive_2013/today13-10-25.html

August 2013   CMS *"Frontier Science Result"* recognition for the work on the pixel detector. http://www.fnal.gov/pub/today/archive_2013/today13-08-23.html

October 2012   Won the Italian nation-wide competition *"program for young researchers - Rita Levi Montalcini,"* with a project title *"A novel pixel detector based on Diamond for high energy physics at future hadron colliders."* The recognition includes both a tenure-track position and fundings.

October 2010   CMS *"Result of the Month"* recognition for the work on the pixel detector. http://www.fnal.gov/pub/today/archive_2010/today10-10-08.html

July 2009   Won the Italian nation-wide competition on particle physics for the eligibility to a temporary INFN research contract.

2009   Annual CMS achievement award for *"outstanding contribution to the commissioning of the pixel detector."*

November 2009 CMS *"Result of the Month"* recognition for the work on the pixel detector. http://www.fnal.gov/pub/today/archive_2009/today09-11-18.html

1999   Scholarship of ~2500 € from *"Legnanese Family Foundation"* for my university grades.

1995   Scholarship of ~100 € from *"Bergamo's CEO association"* for my summer internship results at *"Experimental Institute Models and Structures - ISMES."* http://www.ismes.org

PHYSICS SCHOOLS AND COURSES

November 2018 Intensive course "*Comprehensive VHDL for FPGA design*" provided by DOULOS, https://www.doulos.com

October 2017   Short course provided at the IEEE NSS/MIC conference on *"Radiation detection and measurement."*

November 2014 Intensive course on *"Advanced web programming techniques for experimental physics - tools for client-side data manipulation with HTML5,"* https://agenda.infn.it/conferenceDisplay.py?confId=8324.

2012-2013   Intensive courses on C++ and Python programming languages at the CERN Training Center, https://hr-dep.web.cern.ch/ld/overview

October 2009   Short course provided at the IEEE NSS/MIC conference on *"Integrated circuit front ends for nuclear pulse processing."*

June 2007   CERN-Fermilab joint physics school *"The 2007 Hadron Collider Physics Summer School,"* (Geneva, Switzerland).

August 2003   CERN-JINR joint physics school *"The 2003 European School of High-Energy Physics,"* (Tsakhkadzor, Armenia).

Italian: mother tongue.
English: fluent (both written and verbal).
French: fluent (both written and verbal).

Milano, January 2019
Mauro E. Dinardo