

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”
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RESEARCH INTERESTS

My research activity is focused on the characterization of the Higgs potential through the decay $HH \rightarrow bb \tau\tau$, on the search for evidence of new physics with Lepton-Flavour-Violating (LFV) and Flavour-Changing-Neutral-Currents (FCNC) processes. To this extent, I’m also involved in the R&D of the CMS experiment for new, highly radiation-resistant, solid-state pixel detectors, and the development of the relative data acquisition and calibration software for the High-Luminosity upgrade of LHC (HL-LHC).

CURRENT POSITION

2017–present 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 and Prof. Stefano Forte
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 and Dr. Giacomo Ghiringhelli
 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/>

TEACHING / SEMINARS / REFEREE

- 2022–present** Teacher of “*Physics III*” for the physics faculty at Università degli Studi di Milano-Bicocca
- 2017–2021** Teacher of “*Laboratory II - I module: 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–present** Teacher of “*Laboratory II - II module: 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–present** Referee for various conference proceedings (NIM-A, JINST, PoS)

SCHOLARSHIPS AND AWARDS

- May 2021** Won the Italian nation-wide competition for the eligibility to a full professor position “*Abilitazione Scientifica Nazionale - I Fascia.*” <https://asn18.cineca.it/pubblico/miur/esito/02%252FA1/1/6>

- 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.*” https://www.fnal.gov/pub/today/archive/archive_2015/today15-08-28.html
- November 2013** Won the Italian nation-wide competition for the eligibility to an associate professor position “*Abilitazione Scientifica Nazionale - II Fascia.*” <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

LANGUAGES

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