

## Curriculum Vitae

### MICHELA GRECO

#### Education

2000 PhD in Physics | University of Torino,  
 1996 Degree in Physics (first class Honours and Honourable Mention) | University of Torino,

#### Awards

2010 Award for the 2<sup>nd</sup> Best Communication, Italian Society of Physics (SIF)  
 1996 Award "Turinetti di Priero Simonis" for the best Physics Thesis, University of Torino  
 Award "Optime" for the best Physics Thesis, Industrial Union of Turin

#### Employment History

2014-now Associate Professor, Experimental Physics | University of Torino  
 2006-2014 Researcher, Experimental Physics | University of Torino,  
 2000-2006 INFN researcher with fixed-term contracts | INFN- Genova

#### Academic Activities:

2021-present Vice-Coordinator PhD Program in Physics, Torino Graduate School,  
 2007-present Member of the Academic Board, PhD Program in Physics Torino Graduate School,

#### Teaching

2014-present Laboratory of Advanced Electronics, MSc Degree in Physics  
 2012-present Digital Electronics, MSc Degree in Physics  
 2008-present Materials for Optics, BA Degree in Optics and Optometry  
 2013-2018 Electronics, MSc Degree in Strategic Science  
 2008-2012 Laboratory of Condensed Matter Physics, BA Degree in Physics  
 2009-2010 Physics for cultural heritage, BA Degree in Science and Technology of Cultural Heritage  
 2006-2009 Laboratory of General Physics I, BA Degree in Optics and Optometry  
 Solid State Physics, BA Degree in Science and Technology of Cultural Heritage

#### Supervisor:

2 PhD theses, 18 MSc theses in Physics, 130 BSc theses (16 in Physics, 114 in Optics and Optometry)

#### Referee:

4 PhD theses in Electronics Engineering and 21 MSc theses in Physics.

#### Tutoring:

more than 130 curricular internships and 20 extra-curricular stages for the Degree in Optics and Optometry.

#### Academic Service:

-Member of the Physics Department Committees:  
 Didactics, International Mobility, Laboratories, Monitoring and Review, Research, International Mobility, Stages and Job placement  
 -Representative for the self-assessment and accreditation (AVA) system for Optics and Optometry Degree.

#### Research activity

Michela Greco is author of more than 700 publications in peer-reviewed international journals ( Iris Unito, ORCID: <https://orcid.org/0000-0002-7299-7829>) and takes regularly part to the experiments' collaboration meetings. She has presented the results at international (>30) and national (> 30) conferences with invited talks, oral and poster contributions.

#### 2015-now BELLE2 collaboration (KEK, Tsukuba, Japan).

The Turin group is involved in the definition and optimization of the tracking algorithms for the simulation and reconstruction software, in data analysis and in the construction of the TOP (time of propagation) detector for the identification of  $\pi$  and K mesons in the central region.

#### 2008-present BESIII (Beijing Electron Spectrometer) collaboration (IHEP, Beijing, China)

BESIII offers a unique experimental setup to investigate charmonium, charm, light hadron and  $\tau$  physics. The double-ring electron-positron collider (BEPCII) is designed to operate with luminosity  $L = 1 \times 10^{33} \text{ cm}^{-2}\text{s}^{-1}$  at 3.7 GeV. The Turin group has been involved in the construction and installation (2012) of a zero-degree photon detector (ZDD),

to be used as luminosity monitor and detector of small angle ISR photons. The Turin group manages the cloud infrastructure, has taken part to an -China technological and scientific exchange project and is involved in the European project (RISE-H2020) for the construction of a Cylindrical Gas Electron Multiplier (CGEM) detector that will replace the BESIII MDC inner tracker, subject to aging.

Michela Greco has been the coordinator of the CGEM IT readout electronics since 2016 (on and off detectors, HV and LV systems, slow control and DAQ), as well as actively participating in the development and characterization of the ASIC TIGER (Torino Integrated Electronics for GEM readout) for the front-end electronics. She is also convener for the Integration working group.

#### **2006-present Research development in Optometry**

Michela Greco is involved in the application of digital imaging techniques for the identification of biometric parameters of the anterior chamber of the eye; in the study of the properties of ophthalmic and contact lenses, in particular their wettability before and after application; and in the study of UV and blue light transmittance.

#### **2006-2016 PANDA (antiProton ANnihilation at DArmstadt) collaboration (GSI, Germany)**

The experiment program concerns the study of hadrons and strong interaction using antiprotons of momentum 1.5 - 15 GeV/c on a fixed target. The Turin group has contributed to the muon detector system, has coordinated the PandaRoot offline software and managed a PANDAGrid node. The Turin group has awarded a Strategic Research Grant, Progetti d'Ateneo 2012, The 3-Dimensional Partonic Structure of Protons and Neutrons (3-D nucleon), Michela Greco has mainly contributed to the development of the self-triggering system for high-rate data acquisition using FPGAs.

#### **2000-2007 CMS (Compact Muon Solenoid) collaboration (CERN, Switzerland)**

Michela Greco has contributed to the fabrication of the CMS superconducting solenoid magnet. She has supported the application of innovative superconducting materials for cables, magnets and ionizing radiation detectors. She has also gained expertise in the deposition of thin films and photolithographic techniques.

#### **Organization, Coordination, Direction of Research Groups:**

2021-present	National PI of BESIII experiment- INFN CNS1
2016-present	BESIII Coordinator of CGEM-IT Electronics
2019-present	Convener of CGEM-IT Integration group
2020-present	Convener of FEST Electronics
2019-present	Local PI of UniTO research project "Characterization of Materials for Optics"
2016	Local PI of UniTO research project "Digital imaging for ocular biometry"
2011-2015	Local PI of INFN project PANDA_MU
2011-2016	Member of PANDA Collaboration Board
2009-2015	Member of PANDA Publication Board
2009-2012	Affiliation to National Institute of Metrological Research (INRIM)
2006-2011	Member of Physics Department Executive Board
2009	Spokesperson of ADAPTIVE experiment (INFN-LNS)
2006	Responsible of the assembly of the sensors on the cold mass of the commissioning of the CMS solenoid at CERN (INFN-Genova)
2000-2006	Member of the Winding Working Group of CMS experiment for the technological transfer (INFN-Genova, Ansaldo Superconduttori SpA)

#### **Scientific Participation in European Projects**

- H2020-MSCA-RISE-2019, FEST
- H2020-MSCA-RISE-2014, BESIIICGEM
- EU-FP7 HadronPhysics2, WP3 (FairNet)
- EU-FP7 HadronPhysics3, WP3 (FairNet)
- EU-FP7 HadronPhysics2, WP3 (ENCStudy)
- EU-FP6 Structuring the European Research Area program: NED WGCC

#### **Member of editorial boards**

Technical Editor, ASC14, Large Scale, IEEE Trans Applied Superconductivity  
 Technical Editor, MT23, Large Scale, IEEE Trans Applied Superconductivity  
 Technical Editor, ASC12, Large Scale, IEEE Trans Applied Superconductivity  
 Technical Editor, MT22, Large Scale, IEEE Trans Applied Superconductivity  
 Technical Editor, ASC10, Large Scale, IEEE Trans Applied Superconductivity

Technical Editor, MT20, Large Scale, IEEE Trans Applied Superconductivity  
 Technical Editor, ASC06, Tests and measurements, IEEE Trans Applied Superconductivity  
 Referee of Journal of Instrumentation, Nuclear Instruments and Methods in Physics Research (Section A),  
 Radiation Physics and Chemistry, Superconductor Science and Technology, IEEE Transactions on Applied  
 Superconductivity

### LOC Member

November 2013	International Workshop on Real time, self-triggered front end electronics for multichannel detectors, Torino
April 2013	PANDA FEE/DAQ Workshop, Alba (Cn)
July 2012	PANDA-Computing Workshop, Torino
June 2009	XXIX PANDA Collaboration Meeting, Torino
June 2009	PANDA-DAQT Workshop, Torino
September 2005	MT19, 19th International Conference on Magnet Technology, Genova.

### Examination committee Member

INFN Competition 24296/2022
INFN Competition 22985/2021
INFN Competition 21229/2019
INFN Competition 20313/2018
INFN Competition 18786/2017
INFN Competition 18778/2017
Physics PhD Competition UniGE-2019
Reprise Project-TorVergata
VQR 2015-2019

### OUTREACH

2020-2022 Local PI of project "What next? Il futuro spiegato dai giovani" project -Call "Physics Involving People" INFN CC3M

Participation in science outreach initiatives at Genoa Science Festival, Piedmont Secondary Schools, European Researcher's night.