

Name Domizia Orestano
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Present position Full professor in Nuclear and Particle Physics, Università Roma Tre

Education

1985 Baccalauréat C, Accademie de Grenoble, France
1991 Laurea in Fisica, cum laude, Roma “La Sapienza”
1997 Ph.D. in Physics, Università di Pavia

Positions and affiliations

1992-1993 INFN Fellowship (2 years), Roma
1994-1995 Ph.D. Fellowship, Pavia
1995-2010 Ricercatore (Assistant Professor) at Università Roma Tre (SSD FIS/04)
2011-2016 Professore Associato (Associate Professor) at Università Roma Tre (SSD FIS/01)
2016-present Full professor in Nuclear and Particle Physics, Università Roma Tre (SSD FIS/04)
1990-present Associate with INFN first and then associate with “incarico di ricerca”

Main research activities

1990-1993 Study of beauty hadroproduction at fixed target with the WA92 experiment at the CERN SpS. Contributions to construction and operation of the muon hodoscope and to data analysis.
1992-1993 Study of muon detection techniques for LHC within RD5. Contributions to RPC performance studies at high rates.
1994-1999 Search for neutrino oscillations in the CERN Wide Band Beam with the NOMAD experiment and studies of neutrino interactions. Contributions to the calibration, simulation and reconstruction of the electromagnetic calorimeter, coordination of reconstruction software, analysis of the main oscillation channel.
2000-2010 Precise measurements of pion production aimed at improving the accuracy of neutrino fluxes computations (both for atmospheric neutrinos and neutrinos beams) and at optimising the design of future high intensity neutrino facilities. Contributions to the assembly, acquisition and operation of the electromagnetic calorimeter, to the simulation, to the particle identification and to the data analysis for the pion production at small angles.
2006-2018 Study of the ionization muon cooling with the MICE experiment at RAL. Contribution to the design, construction, acquisition and operation of the KL detector, a scintillation fibers/lead preshower within to the particle identification system downstream of the cooling channel.
1998-present Study of proton-proton collisions at the LHC with the ATLAS detector. Contribution to the construction and quality assessment of the MDT muon detectors at Roma Tre, to the development of the MDT calibration model and software, to the assessment of muon reconstruction and identification performance, to the analysis of inclusive muon production and of associated Higgs boson production with W bosons in the WWW final state. Contribution to the assembly of micromegas detectors for the ATLAS New Small Wheel.

Publications Author or more than 1100 publications on peer-reviewed journals

Roles within national and international collaborations

1995-1996 Responsible of the electromagnetic calorimeter reconstruction in NOMAD
2003-2008 Coordinator of the muon calibration software development in ATLAS
2005-2007 Coordinator of the muon calibration activities in ATLAS Italia
2007-2008 Member of the ATLAS Data Preparation Coordination group for muon calibration and alignment
2008 Member of the ATLAS Muon Steering group
2009-2010 Co-coordinator of the Muon Combined Performance working group in ATLAS
2012-2013 Co-coordinator of the ATLAS Italia Physics Analysis
2014-2017 Member of the ATLAS Speakers Committee and chair of the Committee for a 6 months mandate

Roles in INFN and University

1998-2002 Representative of the Roma Tre INFN researchers

1998-2004 Member of the Physics Department management board (“giunta”)

2002-2012 Member of the Physics Department computing board

2005-2012 Member of the Science Faculty scientific planning board

2006-2013 Erasmus coordinator for Physics at Roma Tre

2010-present Member of Roma Tre Physics Ph.D board

2011-2013 Coordinator of the Department Computing Service

2013-2018 Team leader of the Roma Tre MICE group

2015-2018 Team leader of the Roma Tre ATLAS group

2016-June 2019 President of the Physics division of the Department of Mathematics and Physics

2023 to date President of the Department scientific planning board

July 2019 to date Director of INFN Sezione di Roma Tre

Teaching

At Roma Tre I have taught computing laboratory classes for physics students (2000-2011), experimental methods in particle physics for physics master students (2005-2008), particle physics for physics master students (2010-2019), and I am currently teaching, elements of nuclear and subnuclear physics and optics laboratory for physics students. I have also taught a brief course on current problems in neutrino physics for Ph.D students (2011–2016). I have been involved in classes for the preparation of school teachers (TFA, PAS and CLIL) and coordinated 3 cycles of TFA and PAS. I have supervised 2 Ph.D theses and 25 bachelor and master theses.

Outreach

Involved in the organisation of Particle Physics Masterclasses in Roma Tre since 2005. Contributing to the European Researchers Night at Roma Tre since 2012. Proposing projects for the “Alternanza Scuola Lavoro” and PCTO since 2016.

Selection boards

Member of local selection boards for various positions both in universities and in INFN, of the selection board for the position of “Primo Ricercatore Sperimentale” in INFN for the 2018 call, and of the board for Abilitazione Scientifica Nazionale (2021) in SC 02/01. President of the board for Mathematics and Physics in Lazio in the 2016 selection of high school teachers.

Rome, March 2024

