

SARA DIGLIO

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EDUCATION

Doctor in Physics *January 2009*
Università di Roma Tre, Italian national nuclear physics (INFN), Roma, Italy

Master in Physics *March 2005*
Università di Roma Tre & Laboratori Nazionali di Frascati, INFN, Italy

CURRENT POSITION

Chargé de recherche de classe normale CNRS/In2p3 November 2018 - Present
SUBATECH laboratory, IMT Atlantique, Nantes, France

PREVIOUS POSITIONS

Junior researcher May 2015 - October 2018
SUBATECH laboratory, IMT Atlantique, Nantes, France

Post Doc Labex-OCEVU January 2014 - April 2015
Centre de Physique des Particules de Marseille (CPPM), Marseille, France

Post Doc CoEPP September 2011 - December 2013
University of Melbourne, Melbourne, Australia

Post Doc CNRS May 2009 - August 2011
Laboratoire de l'Accélérateur Linéaire (LAL), Paris-Orsay, France

Scientific collaboration February - April 2009
Laboratoire d'Annecy-le-vieux de Physique des Particules (LAPP), Annecy, France

PhD student November - April 2009
Università di Roma Tre, INFN, Roma, Italy

Post graduation research activity August - November 2005
Università di Roma Tre, INFN, Roma, Italy

Master thesis & Summer Student Program June 2004 - August 2005
Università di Roma Tre & Laboratori Nazionali di Frascati, INFN, Italy & CERN, Switzerland/France

SCIENTIFIC COLLABORATIONS

XENON & DARWIN Collaborations 2015 - Present

- Dark Matter Direct detection
- Neutrinoless Double Beta decay ($0\nu 2\beta$)
- Low energy calibration

The XEMIS project 2016 - Present

- Compton camera for 3γ imaging technique

ATLAS Collaboration 2004 - 2015

- Standard Model searches ($Z+b + \text{jets}$, $Z \rightarrow ee$, $H \rightarrow WW$)
- Beyond the standard model Higgs Searches
- Monitored drift tube of the Muon Spectrometer
- Absolute Luminosity for ATLAS (ALFA)

Phenomenology Theoretical-experimental Collaboration

2014 - 2015

- R-parity violating Supersymmetry

COORDINATION & RESPONSIBILITIES

Seminars at SUBATECH	2018 - Present
XENON detector monitoring and signal corrections	2017 - Present
Analysis coordinator of the group Xénon at SUBATECH	2015 - Present
Organizer of several conferences, symposia and workshops sessions	2014 - Present
Co-editor of 5 papers	2012 - Present
Co-convener of the High Mass $H \rightarrow WW \rightarrow l\nu l\nu$ ATLAS group	2013 - 2015
ATLAS group weekly meetings at CPPM	2014 - 2015
ATLAS contact person of the Heavy Higgs Cross Section Working Group	2012 - 2014
Byte Stream Converter for the ALFA subdetector	2009 - 2011
Webmaster of the ATLAS INFN Roma Tre website	2006 - 2009

TEACHING

Défis technologiques de la recherche fondamentale <i>SUBATECH laboratory, IMT Atlantique, Nantes, France</i>	2018 - 2019, 2019 - 2020 <i>Lecturer</i>
Computing Methods <i>SUBATECH laboratory, IMT Atlantique, Nantes, France</i>	2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020 <i>Lecturer</i>
Electromagnetism & optics <i>Università di Roma Tre, Roma, Italy</i>	2008 - 2009 <i>Teaching Assistant</i>
Nuclear & subnuclear physics <i>Università di Roma Tre, Roma, Italy</i>	2007 - 2008, 2008 - 2009 <i>Teaching Assistant</i>
Mechanics & thermodynamics <i>Università di Roma Tre, Roma, Italy</i>	2007 - 2008 <i>Teaching Assistant</i>

STUDENTS SUPERVISION

Neutrinoless double beta decay search with XENONnT <i>IMT Atlantique, Nantes, France</i>	September 2019 - Present <i>PhD Supervision</i>
DARWIN: sensitivity to WIMPs searches <i>Université de Nantes, Nantes, France</i>	April - July 2020 <i>Master 1 Supervision</i>
XENON1T : Purity monitoring measurements <i>Université de Nantes, Nantes, France</i>	March - May 2020 <i>Master 1 Supervision</i>

XENON1T: Calibration at low energies <i>Université de Nantes, Nantes, France</i>	Janvier 2020 <i>License 3 Supervision</i>
DARWIN: sensitivity to the Neutrinoless double beta decay <i>Université de Nantes, Nantes, France</i>	February - August 2019 <i>Master 2 Supervision</i>
XENON1T: Calibration at low energies <i>Université de Nantes, Nantes, France</i>	April - June 2017 <i>Master 1 & License 3 Supervision</i>
XENON100: Calibration at low energies <i>Université de Nantes, Nantes, France</i>	February - August 2016 <i>Master 2 & License 3 Supervision</i>
SUSY Phenomenology with the ATLAS detector <i>Université d'Aix-Marseille, Marseille, France</i>	February - August 2014 <i>Master 1 Supervision</i>
High mass Higgs with the ATLAS detector <i>University of Melbourne, Melbourne, Australia</i>	January - September 2012 <i>Master 2 Supervision</i>

FELLOWSHIPS & SCHOLARSHIPS

Contract PULSAR : CNRS- Pays de la Loire	Juillet 2019
Bourse Accueil de Chercheurs de la Ville de Marseille	December 2014
Fondazione Angelo Della Riccia research fellowship	February 2009
Doctoral INFN fellowship	November 2005
INFN fellowship for graduated physics students	August 2005
CERN summer student fellowship	June 2004
INFN fellowship for under-graduated physics students	February 2004
Università di Roma Tre Scholarship	October 2000 - October 2001

TALKS

3 Invited Conferences	2013 - Present
5 Conferences selected by selection committee	2008 - Present
2 Public lectures	2012 - Present
6 Seminars	2012 - Present
8 National and international workshops	2012 - Present

PUBLICATIONS

The full list of publication can be found following link (628 as of 05.07.2020).

MEDIA

Journal Interview <i>Science et Avenir</i>	June 2020
Video Interview <i>INAF Multimedia</i>	July 2018