

Chiara Perrina | Curriculum Vitae

Dipartimento di Fisica - Università degli Studi di Roma "La Sapienza"

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"Est modus in rebus" (Orazio, Satire, I, 1, 106)

Personal Details

Name: Chiara

Surname: Perrina

Place of birth: Ariano Irpino (AV), Italy

Date of birth: March 5th, 1988

Citizenship: Italian

Spoken languages: Italian, English

Education

Ph.D. Student in Physics (scholarship winner)

Nov. 2012 – Present

"La Sapienza" University, Roma, Italy

Master's Degree in Physics (Nuclear and Subnuclear Physics specialization)

Nov. 2010 – Nov. 2012

"La Sapienza" University, Roma, Italy

Final grade: 110 *cum laude* (out of 110)

Bachelor's Degree in Physics

Nov. 2007 – Nov. 2010

"La Sapienza" University, Roma, Italy

Final grade: 110 *cum laude* (out of 110)

High School for Science

Sep. 2002 – Jul. 2007

Liceo Scientifico Statale "P.P.Parzanese", Ariano Irpino (AV), Italy

Final grade: 100 (out of 100)

Master Thesis

Defendend on: 26th October 2012

Title: *Search for astrophysical sources of high energy neutrinos with the ANTARES telescope*

Advisors: Prof. Antonio Capone, Dr. Giulia De Bonis (Co-Advisor)

Bachelor Thesis

Defendend on: 12th November 2010

Title: *Detection of high energy astrophysical tau neutrinos at the Pierre Auger Observatory*

Advisors: Prof. Antonio Capone, Dr. Francesco Simeone (Co-Advisor)

Conferences, Workshops and Schools (with Contribution)

YRM 2015

Oct. 12 – 14, 2015

6th edition of the Young Researcher Meeting

L'Aquila, Italy

Contribution: Search for point-like neutrino sources above the horizon with the ANTARES Neutrino Telescope.
(Talk – proceeding in submission).

<http://www.yrmr.it/drupal/?q=content/6th-yrm-2015-laquila-program>

VLVnT-2015

Sep. 14 – 16, 2015

7th edition of the Very Large Volume Neutrino Telescope Workshop

Roma, Italy

Contribution: The KM3NeT-IT Tower data acquisition and data transport electronics. (Co-Author of the talk on behalf of the KM3NeT-Italy Collaboration – proceeding in submission).

<https://indico.cern.ch/event/378423/session/10/contribution/80>

ICRC 2015 - 34th International Cosmic Ray Conference

Jul. 30 – Aug. 6, 2015

Den Haag, The Netherlands

Contribution: Search for point-like neutrino sources above the horizon with the ANTARES Neutrino Telescope. (Poster on behalf of the ANTARES Collaboration – proceeding submitted).

<https://indico.cern.ch/event/344485/session/136/contribution/986>

IFAE 2015 - Incontri di Fisica delle Alte Energie, XIV edizione

Apr. 8 – 10, 2015

Roma, Italy

Contribution: Ricerca di neutrini cosmici da sorgenti puntiformi con il Telescopio ANTARES. (Search for cosmic neutrinos from point-like sources with the ANTARES Telescope.) (Poster on behalf of the ANTARES Collaboration – proceeding submitted).

<https://agenda.infn.it/contributionListDisplay.py?confId=8681>

NeuTel 2015 - XVI International Workshop on Neutrino Telescopes

Mar. 2 – 6, 2015

Venezia, Italy

Contribution: Search for ultra-high energy neutrinos from below and above the horizon with the ANTARES Telescope (Poster on behalf of the ANTARES Collaboration – proceeding submitted).

<https://agenda.infn.it/internalPage.py?pageId=8&confId=8620>

NuPhys2014: Prospects in Neutrino Physics

Dec. 15 – 17, 2014

London, United Kingdom

Contribution: The ANTARES Neutrino Telescope. (Poster on behalf of the ANTARES Collaboration – proceeding published).

<https://indico.ph.qmul.ac.uk/indico/internalPage.py?pageId=11&confId=22>

TMEX 2014 Theory Meeting Experiment 2014 :: Neutrinos And Cosmos

Sep. 3 – 5, 2014

Warszawa, Poland

Contribution: Recent results from the ANTARES neutrino telescope. (Talk on behalf of the ANTARES Collaboration).

<http://neutrino.fuw.edu.pl/indico/getFile.py/access?contribId=6&sessionId=8&resId=0&materialId=slides&confId=0>

ISAPP 2013

Jul. 14 – 23, 2013

International School on AstroParticle Physics (Neutrino Physics and Astrophysics)

LSC, Canfranc-Estation, Spain

Contribution: ANTARES and the search for astrophysical point sources of UHE neutrinos placed above the horizon. (Poster & Talk).

http://www.lsc-canfranc.es/ISAPP2013/images/transparencies/Chiara_Perrina.pdf

Conferences, Workshops and Schools (without Contribution)

RICAP-14

Sep. 30 – Oct. 3, 2014

5th Roma International Conference on AstroParticle Physics

Noto, Sicily, Italy

RICAP-13

4th Roma International Conference on AstroParticle Physics
Roma, Italy

May 22 – 24, 2013

Introduction to Fortran 90

CINECA Course
Roma, Italy

Jan. 22 – 25, 2013

Introduction to Scientific and Technical Computing in C++

CINECA Course
Roma, Italy

Dec. 11 – 14, 2012

NOW 2012

Neutrino Oscillation Workshop
Conca Specchiulla (LE), Italy

Sep. 9 – 16, 2012

RICAP-11

3rd Roma International Conference on AstroParticle Physics
Roma, Italy

May 25 – 27, 2011

Scientific experiences and activities

Member of the Local Organizing Committee for VLVnT-2015, 7th edition of the Very Large Volume Neutrino Telescope Workshop (Sep. 14 – 16, 2015, Roma).

<https://indico.cern.ch/event/378423/page/2>

Member of the ANTARES shift crew and the NEMO shift crew: responsible of the operation, calibration and monitoring of the ANTARES detector and of the NEMO-Phase 2 Tower.

Referee for the "Nuclear Instruments and Methods in Physics Research (Section A)" journal.

Teaching activities

Mathematics lectures

AY 2015/2016

For students with additional educational requirements of the 1st year of the Bachelor's degree in Biology
"La Sapienza" University, Roma, Italy

Teaching Assistant in Nuclear and Subnuclear Physics class

AY 2014/2015

For students of the 3rd year of the Bachelor's degree in Physics
"La Sapienza" University, Roma, Italy

<http://www.roma1.infn.it/people/perrina/FNSNI.html>

Lectures on Solar Neutrinos for Astroparticle Physics class

AY 2014/2015

For students of the Master's degrees in Physics and in Astronomy and Astrophysics
"La Sapienza" University, Roma, Italy

http://www.roma1.infn.it/people/capone/Fisica_Astroparticellare_2015/Lezioni_25-26-27-28-29_Neutrini_Solari.pdf

Tutor for the preparation of the dissertations for the Astrophysics Laboratory class

AY 2013/2014

For students of the 3rd year the Bachelor's degree in Physics and Astrophysics
"La Sapienza" University, Roma, Italy

Teaching Assistant in Mechanics class

AY 2013/2014

For students of the 1st year of the Bachelor's degree in Physics

"La Sapienza" University, Roma, Italy
<http://www.roma1.infn.it/people/perrina/meccanica.html>

Teaching Assistant in Nuclear and Subnuclear Physics class AY 2013/2014
For students of the 3rd year of the Bachelor's degree in Physics
"La Sapienza" University, Roma, Italy
http://www.roma1.infn.it/people/perrina/FNSNI_14.html

Lectures on Solar Neutrinos for Astroparticle Physics class AY 2013/2014
For students of the Master's degrees in Physics and in Astronomy and Astrophysics
"La Sapienza" University, Roma, Italy
http://www.roma1.infn.it/people/capone/Fisica_Astroparticellare_2014/Lezioni_45&46.pdf

Funding grants

Bando Ricerca Scientifica Anno 2015: Progetti Avvio alla ricerca Jul. 2015
Awarded by "La Sapienza" University of Roma.

Awards

Premio «TITO MAIANI» per il 2015 Jun. 2015
Awarded by the Accademia Nazionale dei Lincei.

Premio ARAP in Fisica delle Particelle Elementari Jun. 2012
Awarded annually by ARAP (Roman Association for Astro-Particles)
to outstanding Master's students in Physics with specialization in Particle Physics.
Talk title: "Measurement of the top quark-pair production cross section at LHC"

Computer skills

Programming Languages: C (advanced), C++ (advanced), Fortran90 (basic), Python (basic)

Markup Languages: L^AT_EX(advanced), HTML (intermediate)

Applications: Microsoft Office (advanced), Open Office (advanced)

Operating Systems: Microsoft (intermediate), MAC (intermediate), Linux (intermediate)

List of publications

- Journal papers.....
- 1: S. Adrian-Martinez *et al.* (ANTARES Collaboration) *ANTARES constrains a blazar origin of two IceCube PeV neutrino events*, A&A 576, L8 (2015). <http://dx.doi.org/10.1051/0004-6361/201525670>.
 - 2: S. Aiello *et al.* (NEMO Collaboration) *Measurement of the atmospheric muon depth intensity relation with the NEMO Phase-2 tower*, Astroparticle Physics 66 (2015) pp. 1-7, <http://dx.doi.org/10.1016/j.astropartphys.2014.12.010>.
 - 3: S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Constraining the neutrino emission of gravitationally lensed Flat-Spectrum Radio Quasars with ANTARES data*, JCAP 11 (2014) p. 017, <http://dx.doi.org/10.1088/1475-7516/2014/11/017>.
 - 4: S. Adrian-Martinez *et al.* (KM3NeT Collaboration) *Deep sea tests of a prototype of the KM3NeT digital optical module*, Eur. Phys. J. C, 74 (2014), p. 3056, <http://dx.doi.org/10.1140/epjc/s10052-014-3056-3>.
 - 5: S. Adrian-Martinez *et al.* (ANTARES Collaboration) *A search for time dependent neutrino emission from microquasars with the ANTARES telescope*, JHEAp, 3-4 (2014) pp. 9-17, <http://dx.doi.org/10.1016/j.jheap.2014.06.002>.

- 6:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Searches for clustering in the time integrated skymap of the ANTARES neutrino telescope*, JCAP 1405 (2014) p. 001, <http://dx.doi.org/10.1088/1475-7516/2014/05/001>.
- 7:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Searches for point-like and extended neutrino sources close to the galactic center using the ANTARES neutrino telescope*, ApJ 786 L5 (2014), <http://dx.doi.org/10.1088/2041-8205/786/1/L5>.
- 8:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *A Search for Neutrino Emission from the Fermi Bubbles with the ANTARES Telescope*, Eur. Phys. J. C, 74 (2014) p. 2701, <http://dx.doi.org/10.1140/epjc/s10052-013-2701-6>.
- 9:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Measurement of the atmospheric ν_μ energy spectrum from 100 GeV to 200 TeV with the ANTARES telescope*, Eur. Phys. J. C, 73 (2013), pp. 1–12. <http://dx.doi.org/10.1140/epjc/s10052-013-2606-4>.
- 10:** S. Aiello *et al.* (NEMO Collaboration) *The optical modules of the phase-2 of the NEMO project*, Journal of Instrumentation, 8 (2013), p. P07001. <http://stacks.iop.org/1748-0221/8/i=07/a=P07001>.
- 11:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Search for muon neutrinos from gamma-ray burst with the ANTARES neutrino telescope using 2008 to 2011 data*, A&A 559, A9 (2013). <http://dx.doi.org/10.1051/0004-6361/201322169>.

Conference proceedings.....

- 1:** C. Perrina *et al.* (ANTARES Collaboration) *Contributions to the 34th International Cosmic Ray Conference (ICRC 2015)*, e-Print: astro-ph.HE/1510.04508v1, <http://arxiv.org/pdf/1510.04508v1.pdf>.
- 2:** C. Perrina *et al.* (ANTARES Collaboration) *The ANTARES Neutrino Telescope*, CNUM: C14-12-15 e-Print: astro-ph.IM/1505.00224, <http://arxiv.org/pdf/1505.00224.pdf>
- 3:** S. Viola *et al.* (NEMO Collaboration) *Underwater acoustic positioning system for the SMO and KM3NeT - Italia projects*, AIP Conf. Proc. 1630, 134 (2014), <http://dx.doi.org/10.1063/1.4902790>.
- 4:** C. Pellegrino *et al.* (NEMO Collaboration) *The trigger and data acquisition for the NEMO-Phase 2 tower*, AIP Conf. Proc. 1630, 158 (2014), <http://dx.doi.org/10.1063/1.4902796>.
- 5:** M. G. Pellegriti *et al.* (NEMO Collaboration) *Long-term optical background measurements in the Capo Passero deep-sea site*, AIP Conf. Proc. 1630, 94 (2014), <http://dx.doi.org/10.1063/1.4902780>.
- 6:** T. Chiarusi *et al.* (NEMO Collaboration) *Status and first results of the NEMO Phase-2 tower*, JINST 9 C03045 (2014), <http://dx.doi.org/10.1088/1748-0221/9/03/C03045>.
- 7:** S. Adrian-Martinez *et al.* (ANTARES Collaboration) *Contributions to the 33rd International Cosmic Ray Conference (ICRC 2013)*, e-Print: astro-ph.HE/1312.4308, <http://arxiv.org/pdf/1312.4308.pdf>.

Roma, November 3, 2015