ANTONIO CAPONE
CURRICULUM VITAE
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PERSONAL INFORMATION

Name	**CAPONE, Antonio**
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E-mail	**Antonio.capone@roma1.infn.it**
Nationality	Itally
Date of birth	30, MAY, 1951

WORK EXPERIENCE

• Since 1/11/2021	Professor at the Physics Department of the SMFN Faculty of the Sapienza University as “High Qualification Expert”, teacher for “Particle and Astroparticle Physics”
• Since 1/10/2021	Research Fellow in the Department of Physics at Ariel University, Ariel, 40700, Israel
• 1/11/2001 to 31/10/2021	Full Professor at the Physics Department of University "La Sapienza" in Rome, Italy and
• Name and address of employer	Research Associate for Istituto Nazionale Fisica Nucleare, Roma. Retired 31/10/2021.
• Occupation or position held	Full Professor, chair of "Mechanics"
• Teaching activities and responsibilities	Teacher of "Mechanics" and "Astroparticle Physics" for the "Corso di Laurea" in Physics and "Astronomy with High energy Neutrinos" for the PHD course in Physics of University "La Sapienza", Roma. **2015** Teacher "Astronomy with High energy Neutrinos" for the PHD course in Physics for the University of Salerno **2012-2021** Member of the College of the PhD school in "Physics" **2010-2012** Member of the College of the PhD school in "Astronomy, Astrophysics and Space Science"
Research activities and responsibilities	**2019** PI of the project “Caratterizzazione delle sorgenti astrofisiche impulsive di fotoni di alta energia (GRB, AGN, Magnetars, . . .) e di onde gravitazionali: stima dei flussi di neutrini attesi da tali sorgenti.” Funded (37.7 k€) by the University "La Sapienza. **2018** PI of the project “Study of transient astrophysical sources of neutrinos and low and high energy photons with a multimessenger approach..” Funded (4.0 k€) by the University "La Sapienza. **2016** PI of the project " Caratterizzazione e test di una sorgente acustica parametrica per la calibrazione di una rete di sensori acustici sottomarini" funded (13k€) by the University "La Sapienza. **2016** PI of the project "Approccio multi-messaggero alla ricerca di sorgenti astrofisiche di Raggi Cosmici di altissima energia" as part of a collaboration between the University La Sapienza and the Sau Paolo University in Brasil, funded (5k€) by the University "La Sapienza. **2015** PI of the project "Development of a GPU-based system for fast analysis of real

time data streams" funded (11k€) by the University "La Sapienza.

2012-2015 national coordinator of the Italian INFN group "KM3" that includes the participation to the ANTARES experiment, to the KM3NeT collaboration and the continuation on NEMO activities for the construction of the Undersea Cherenkov Telescope for High Energy astrophysical Neutrinos. In the period 2001-2012 local coordinator of the ANTARES and of the NEMO Roma-group. During December 2011, in the framework of the "Piano Operativo Nazionale Ricerca e Competitivita' 2007-2013" part of the budget (about 21 M€) for the construction of the KM3NeT neutrino telescope was provided allowing to enter in the construction phase.

2018 Organizer and Editor of the 7th "Roma International Conference on Astroparticle Physics", (RICAP18 4th – 7th September 2018, RomaTRE University, Roma).
2016 Organizer and Editor of the 6th "Roma International Conference on Astroparticle Physics", (RICAP16, 21nd – 24th June 20136, Villa Tuscolana, Frascati).
2015 Chairman organizer and Editor of the 7th "Very Large Volume Neutrino Telescope 2015" Workshop, (VLVnT15, 14th – 16th Sept. 2015).
2014 Organizer and Editor of the 5th "Roma International Conference on Astroparticle Physics", (RICAP14, 30/09 – 3/10, 2013, Noto, SR, Italy).
2013 Chairman organizer and Editor of the 4th "Roma International Conference on Astroparticle Physics", (RICAP13, 22nd – 24th May 2013).
2011 PI of the project "Sviluppo di una sorgente acustica compatta, basata su ceramiche piezoelettriche, per la calibrazione di una rete di sensori acustici sottomarini" funded (12k€) by the University "La Sapienza.
2008-2012 Coordinator of the Work Packages "Industrial production for deep sea components" for the KM3NeT "Preparatory Phase" project funded by EU in the framework of 7th Frame Program.
2006-2009 Coordinator of the Work Packages "Shore and deep-sea infrastructure" for the KM3NeT "Design Study" project funded by EU in the framework of 6th Frame Program.
2008: Chairman, organizer and Editor of the 3rd International Workshop on the "Acoustic and Radio EeV Neutrino detection Activities", (ARENA-2008, in the period June 25th-27th, 2008).
2007 Promoter, Chairman, organizer and Editor of the "1st Roma International Conference on Astroparticle Physics", (RICAP07, 20th -22nd June 2007).
2006 Founder, and since then President, of the Cultural "Associazione Romana per le Astro Particelle", ARAP, (funded with the collaboration of Prof. Mario De Vincenzi and Dr. Aldo Morselli).
2003 Principal Investigator and responsible for the project "Technologies development for the detection of Astrophysical Neutrinos in undersea Telescopes" funded by the Italian Minister of University and Research (PRIN-2003)
2001-2020 – INFN local coordinator of the group NEMO and ANTARES for the search of High Energy Astrophysical Neutrinos.

1994 - 1995	Employed as "Scientific Associate" at the European Center for Nuclear Research (CERN) being "on leave of absence" from University "La Sapienza" in Rome, Italy.
• Name and address of employer	European Center for Nuclear Research (CERN)
• Occupation or position held	Researcher
• Main activities and responsibilities	Neutrino physics with the CHARM-II detector exposed at the SPS 400 GeV for the study of neutrino oscillation: coordinator of several data analysis groups.
• From Nov. 1991 to Nov. 2001	Associate Professor, on leave of absence in the period 1994-95, Research Associate for Istituto Nazionale Fisica Nucleare, Roma
• Name and address of employer	Physics Department of University "La Sapienza" in Rome, Italy

• Occupation or position held	Professor of "Physics" for the "Corso di Laurea" in "Informatics" (1991/1993)
• Teaching activities and responsibilities	Teaching of "Physics" for the "Corso di Laurea" in "Informatics" (1991/1993) and "Experiments of Physics III" for the "Corso di Laurea" in Physics (1994/2001)
Research activities and responsibilities	**1998-2001:** promoter and IINFN-Roma local coordinator of the project NEMO for the realization of a submarine Cherenkov detector for High Energy Astrophysical Neutrinos. Responsible of the study of the deep-sea properties for the characterization of the deep-sea detector. **1991-1998**: Neutrino physics with the CHARM-II detector exposed at the SPS 400 GeV –proton neutrino beam. **1994-1997**: INFN national coordinator of the project NESTOR for the realization of a submarine Cherenkov detector for High Energy Astrophysical Neutrinos
• From Nov. 1987 to Nov. 1991	Associate Professor, Research Associate for Istituto Nazionale Fisica Nucleare, Roma
• Name and address of employer	Università degli Studi della Basilicata, Potenza, Italy
• Occupation or position held	Associate Professor
Teaching activities and responsibilities	Teaching of "Physics-1" and "Institution of Theoretical Physics" for the "Corso di Laurea" in "Mathematics" and "Experiments of Physics" for the "Corso di Laurea" in "Chemistry".
Research activities and responsibilities	Neutrino physics with the CHARM and CHARM-II. Coordinator of several CHARM-II analyses for the study of neutrino oscillations.
1984 - 1987	Employed as "Staff Member" at the European Center for Nuclear Research (CERN) being "on leave of absence" from University "La Sapienza" in Rome.
• Name and address of employer	European Center for Nuclear Research (CERN)
• Occupation or position held	Researcher
• Main activities and responsibilities	Neutrino physics with the CHARM and CHARM-II detectors exposed at the SPS 400 GeV –proton neutrino beam. Coordinator of several CHARM analyses and of the CHARM-II development, tests and construction.
1981 - 1983	Employed as "Fellow" at the European Center for Nuclear Research (CERN) being "on leave of absence" from University "La Sapienza" in Rome, Italy.
• Name and address of employer	European Center for Nuclear Research (CERN)
• Occupation or position held	Researcher
• Main activities and responsibilities	Neutrino physics with the CHARM detector exposed at the SPS 400 GeV –proton neutrino beam: purely leptonic neutrino interactions, short lived particles in proton beam dump experiment, nucleon structure functions with neutrino interactions.
1981 - 1987	University Researcher on leave of absence during 1981-1983 and 1984-1987, Research Associate for Istituto Nazionale Fisica Nucleare, Roma.
• Name and address of employer	Physics Department of University "La Sapienza" in Rome, Italy
• Occupation or position held	University Researcher
Teaching activities	Classes of exercises for "General Physics"
• Research activities and responsibilities	Neutrino physics with the CHARM detector exposed at the SPS 400 GeV –proton neutrino beam
1976 - 1981	Assistant professor, Research Associate for Istituto Nazionale Fisica Nucleare, Roma
• Name and address of employer	Temporary contract with Faculty of Mathematical, Physical and Natural Sciences of the University "La Sapienza", Roma, Italy
• Occupation or position held	University Researcher
Teaching activities	Classes of exercises for "General Physics"

• Research activities and responsibilities	Multigamma experiment at the Intersecting Storage Ring (CERN) and participation to the neutrino CHARM experiment (CERN).
1975 - 1976	Fellowship as researcher.
• Name and address of employer	Temporary contract with Istituto Nazionale Fisica Nucleare (INFN), Roma, Italy.
• Occupation or position held	Researcher
Teaching activities	Classes of exercises for "General Physics"
• Research activities and responsibilities	Study of the production of pions in the interaction of an electron beam on a proton target at the INFN-Frascati electron Synchrotron; Multigamma experiment at the Intersecting Storage Ring (CERN)
1974 - 1975	High School Professor, Research Associate for Istituto Nazionale Fisica Nucleare, Roma
• Name and address of employer	Istituto Tecnico Industriale Statale "Guglielmo Marconi", Civitavecchia
• Occupation or position held	Teaching "Electronics" and "Electrotechnics"

EDUCATION AND TRAINING

1969 - 1974	"Laurea" in Physics
• Name and type of organisation providing education and training	Institute of Physics, "La Sapienza" in Rome, Italy, Faculty of Mathematical, Physical and Natural Sciences of the University "La Sapienza", Roma, Italy
• Principal subjects/occupational skills covered	General Physics, High energy particle physics
• Title of qualification awarded	"Laurea" in Physics
• Level in national classification	110/110 Magna cum Laude

MOTHER TONGUE	**ITALIAN**
OTHER LANGUAGES	
	ENGLISH
• Reading skills	GOOD
• Writing skills	GOOD
• Verbal skills	GOOD
	FRENCH
• Reading skills	GOOD
• Writing skills	GOOD
• Verbal skills	GOOD
SOCIAL SKILLS AND COMPETENCES	RESEARCH GROUP LEADER SINCE 1994 (PROJECTS NEMO, ANTARES, KM3NET, KM3)
ORGANISATIONAL SKILLS AND COMPETENCES	**2018-2020** Member of the Board for “Abilitazione Scientifica Nazionale” ASN for “Settore Concorsuale 02/A1. **2014-2019** Member of the "Giunta" of the Physics Depart. of University "La Sapienza" **2012-2015** INFN national responsible of the Km3 group for the construction of the Undersea Cherenkov Telescope for High Energy astrophysical Neutrinos.

For more information go to
www.roma1.infn.it/people/capone

2016 Organizer and Editor of the 6th "Roma International Conference on Astroparticle Physics", (RICAP16, 21nd – 24th June 20136, Villa Tuscolana, Frascati).
2015 Chairman organizer and Editor of the 7th "Very Large Volume Neutrino Telescope 2015" Workshop, (VLVnT15, 14th – 16th Sept. 2015).
2014 Organizer and Editor of the 5th "Roma International Conference on Astroparticle Physics", (RICAP14, 30/09 – 3/10, 2013, Noto, SR, Italy).**2013** Chairman, organizer and editor of the 4th "Roma International Conference on Astroparticle Physics", RICAP-07, Roma, 22nd – 24th May, 2013.
2008-2012 coordinator of the Work Packages "Industrial production for deep sea components" for the KM3NeT "Preparatory Phase" project funded by EU in the framework of 7th Frame Program.
2008 Chairman, organizer and editor of the 3rd Roma International Workshop on the "Acoustic and Radio EeV Neutrino Detection Activities", ARENA-08, Roma, 25th – 27th June, 2008.
2007 Promoter, Chairman organizer and editor of the 1st "Roma International Conference on Astroparticle Physics", RICAP-07, Roma, 20th – 22nd June, 2007.
2006-2009 coordinator of the Work Packages "Shore and deep-sea infrastructure" for the KM3NeT "Design Study" project funded by EU in the 6th Frame Program.
2006 Since 2006 President of the Cultural association: "Associazione Romana per le Astro Particelle" funded by Prof. Antonio Capone, Prof. Mario De Vincenzi and Dr. Aldo Morselli.
2005 Member of the Organizing Committee and editor of the 2nd International Workshop on the "Very Large Volume Neutrino Telescopes", VLVnT2, Catania, 8th – 11th November, 2005.
2003 Principal Investigator and responsible for the project "Technologies development for the detection of Astrophysical Neutrinos in undersea Telescopes" funded by the Italian Minister of University and Research (PRIN-2003).
2002-2005 Member of the International Advisory Committee and organizer of the Parallel Session on "Astroparticle Experiments" for the "Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications".
1994-1998 As Principal Investigator for INFN I have coordinated the work of the Italian component of the NESTOR experiment .

TECHNICAL SKILLS AND COMPETENCES

Good knowledge of scientific computer languages, fortran