Fausto Guarino

PERSONAL INFORMATION Fausto Guarino



Affiliation

Università di Napoli Federico II Dipartimento di Fisica "Ettore Pancini" Complesso Universitario di Monte S.Angelo Via Cintia, 80126, Napoli, Italy

State personal website

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Enterprise	University	EPR
	⊠ Full professor	☐ Research Director and 1st level Technologist /
☐ Management Level		First Researcher and 2nd level Technologist /
		Principal Investigator
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII	☐ Researcher and Technologist of IV, V, VI and VII
	level / Technical collaborator	level / Technical collaborator

SSD - FIS/01 - FISICA SPERIMENTALE

ACADEMIC POSITION	
Since 2021	Full Professor at the "Ettore Pancini" Department of Physics, University of Naples "Federico II" (Scientific Disciplinary Sector: FIS/01- Experimental Physics, sector 02/A1)
EDUCATION AND WORK EXPERIENCE	
2015 - 2021	Associate Professor at the "Ettore Pancini" Department of Physics, University of Naples "Federico II" (Scientific Disciplinary Sector: FIS/01- Experimental Physics, sector 02/A1)
1991 - 2015	Assistant Professor at the University of Naples "Federico II"
SCIENTIFIC ACTIVITIES	
1989 - 2000	Member the MACRO collaboration at the INFN Gran Sasso underground laboratory. From 1994 to 2000 chair of the Rare Particle Working group of the experiment.
1995 - 1999	Member of the NOE and ICANOE collaborations for the definition of a tau neutrino appearance detector for the study of neutrino oscillations in Long Baseline CERN-Gran Sasso.
2000 - 2001	In the PAMELA collaboration for a space based cosmic ray detector
2002 - Present	member of the Pierre Auger Collaboration. Since 2004 scientific coordinator of the Auger group in Napoli. Responsible for procurement, assembling and test of a significant fraction of the photodetectors for the present Auger Upgrade program (AugerPrime).
2010 - Present	member of the Jem-Euso collaboration, to define a space mission for the detection of ultra high energy cosmic rays. Working on event reconstruction and atmospheric monitoring. From 2013 to 2017 task leader of the detector simulation working group.
2018 - Present	member of the Crystal Eye collaboration to define a wide field of view space detectors for the detection of electromagnetic counterparts of gravitational waves

2021 - Present

member of the SWGO collaboration for the definition of a wide field of view high energy Gamma rays $_W$ observator. Scientific coordinator of the local group. Coordinator of the Detector Working Group in the $_W$ Collaboration, Responsible for the photosensors task

2022 - Present

member of the NUSES collaboration, a new space mission project promoted by the Gran Sasso Science Institute (GSSI) in collaboration with Thales Alenia Space Italy (TAS-I), devoted to the exploration of new technologies and observational approaches for experiments in space.

GRANTS

PRIN 2005:

Raggi cosmici di alta energia (10^15 – 10^21 eV): spettri energetici, composizione primaria e interazioni. Misure, analisi, interpretazione, sviluppi. Connessione di energie, apparati e tecniche diverse

Role: Research unit coordinator

PRIN 2007:

Studio della radiazione cosmica di altissima energia tramite misure ed analisi delle direzioni di arrivo delle particelle primarie: ricerca di sorgenti, identificazione della transizione tra la radiazione galattica ed extragalattica, origine, propagazione, interazioni.

Role: Research unit coordinator

Bando per cofinanziamenti di progetti di ricerca interuniversitari con l'Argentina (CUIA) 2011-2012: Studio delle anisotropie dei raggi cosmici per gruppo di massa con l'Osservatorio Pierre Auger Role: Research unit coordinator

Bando MAE 2014: "Definizione di una soluzione tecnologica per lo studio della composizione dei Raggi Cosmici di Altissima Energia con l'Osservatorio Pierre Auger" - ARGENTINA Role: Research unit coordinator

SCIENTIFIC COORDINATION

1994 -1996:	Coordinator of the Magnetic Monopoles searches in MACRO
1996 -1998:	Coordinator of the "Rare particles working group" in MACRO
1995 -2000:	Coordinator of the simulation group for the experiment proposals on the CNGS beam NOE and ICANOE.
1998:	Coordinator of the analysis group for the SPS test beam of the NOE prototype.
2004 - 2020:	Scientific coordinator of the INFN Napoli group in the Auger experiment
2007 - 2009:	Responsible for development and production of the analog readout electronics for the High Elevation Telescopes (HEAT) of the Auger experiment.
2012:	Chairman of the electronics review panel for the muon detector AMIGA of the Auger Experiment
2014 - 2018:	Task leader of the Simulazion gropu of the Jem-Euso collaboration
2015 - 2018:	Task leader of the EUSO-Balloon Analysis Working Group
2017 - 2020:	Responsible for the production and validation of part of the photomultipliers for the Upgrade of the Auger experiment: AugerPrime
2021 - present:	Coordinator for the Detector working Group for the SWGO collaboration
2021 - present:	Responsible for the photodetectors in the SWGO collaboration

INSTITUTIONAL APPOINTMENTS

1994 -1997:	Member of the executive board Dipartimento di Scienze Fisiche dell'Università Federico II
1994 -1997:	Responssible for the department store of Dipartimento di Scienze Fisiche dell'Università Federico II
2015 -1018:	Contact person for "curriculum Subnucleare e Astroparticellare" of the physics department
2015 - 2019:	Responsible of the Campus Grid computing center of the Dipartimento di Fisica "E. Pancini"
	dell'Università Federico II and sezione di Napoli dell'Istituto Nazionale di Fisica Nucleare
2016 -2018:	Member of the executive board del Dipartimento di Fisica "E. Pancini" dell'Università Federico II
2016 -2018:	Coordinator of te Astroparticle Physics group of Dipartimento di Fisica "E. Pancini" dell'Università
	Federico II
2016 - 2019:	Coordinator of "Servizio di Calcolo e Reti " of Dipartimento di Fisica "E. Pancini" dell'Università
	Federico II and sezione di Napoli dell'Istituto Nazionale di Fisica Nucleare
2016 -2018:	Member of the Scientific and Technical Committee of Accelerator Laboratory of Dipartimento di Fisica
	"E. Pancini" dell'Università Federico II
2022 - Present	Member of the Scientific Committee of the Physics Dept. University of Naples, Italy

STUDENTS SUPERVISION

Supervisor of 14 bachelor theses Supervisor of 11 master and four-year theses Tutor of 6 PhD theses. Supervisor of 7 post doc young researches

PUBLICATIONS Scopus database as at 22/04/2024, Presently an error on scopus splits the author in two

- papers: 346 - citations: 17950 - h-index: 61