

## PERSONAL INFORMATION

Fausto Guarino

 Affiliation  
Università di Napoli Federico II  
Dipartimento di Fisica "Ettore Pancini"  
Complesso Universitario di Monte S. Angelo

 State personal website

- <https://orcid.org/0000-0003-1427-9885>

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII 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 observator. Scientific coordinator of the local group. Coordinator of the Detector Working Group in the Collaboration, Responsible for the photosensors task w  
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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 Simulazione group 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: Responsible 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 the 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