Prof. Francesco Giordano

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Enterprise	University	EPR
☐ Management Level	X Full professor	☐ Research Director and 1st level Technologist / 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 level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

May 2022 Full Professor - Experimental Physics

University of Bari - Department of Physics

October 2015 – May 2022 Associate Professor – Experimental Physics

University of Bari - Department of Physics

January 2018- Ocvo Coordinator of Physics Courses

University of Bari - Department of Physics

May 2018 – Today Member of Board of Directors

Technological Aerospace District - Apulia Region - Italy

January 2019 - Today Deputy Rector phd Courses

University of Bari - Department of Physics

January 2022 - Today Delegate for PNRR – Space Activities

University of Bari - Department of Physics

2006 – 2015 Assistant professor

University of Bari - Department of Physics

2006 - Today Affiliated Scientist

National Institute of Nuclear Physics - Unit of Bari

2002 – 2006 Post Doc – Experimental Physics

University of Bari - Department of Physics

EDUCATION AND TRAINING

2002 Phd in Physics

Department of Physics – University of Bari

1998 **Master Degree in Physics** – Summa cum Laude

Department of Physics - University of Bari

WORK ACTIVITIES

AWARDS

Certificate of Appreciation - NASA - Given to Francesco Giordano for completing the construction phase and for the execution of environmental tests on the LAT tracker system; **Group Achievement Award** – NASA - Given to Francesco Giordano for the construction of the LAT tracker; **Group Achievement Award** – NASA - Given to Francesco Giordano for the contribution to important scientific results obtained in the first two years of the Femi

mission

GRANTS

2022 PANDORA (50k) - Multi-disciplinary project, involving 5 different scientific areas (Physics, Mathematics, Law, Phylosophy and Biotech.) for the implementation of multidisciplinary research project focused on horizon Europe Calls as well as dissemination activity on space and aerospace issues; 2022 - GATB (10M) (Grottaglie Airport Test Bed) - Contact person for University of Bari and member of the DTA working group for the elaboration of a project proposal aimed at the realization of the Research Infrastructure (IR) "Airport Test Bed" in Grottaglie (Taranto), for the development of technologies for unmanned transport systems ("Unmanned"); 2018 - RPASinAIR (7.7M) - PONARS funded by Italian Minister of Education, University and Scientific Research (MIUR) for the creation of a laboratory for experimenting RPAS (drones) missions into non-segregated air space development in Puglia Region; 2018 - CLOSE to the Earth (8.1M) - The project aims at building a technological prototype opening the access to the missions at Very Low Earth Orbit. The goal is to design a low mass vehicle - below 500 kg with the propulsion system and payload with an adequate operating life (i.e., at least three years). For the Consortium, the design of the vehicle and its subsystems will be a significant challenge; 2014-PON Apulia Space (6M) The aim of the project was to strengthen and enhance the entire research chain and the cooperation networks between the research system and the companies of the Apulian aerospace system.. SCT - Schwarzschild-Couder Telescope (3.2M) - The project was submitted in January 2018 and fully funded in September of the same year for a total budget of \$ 3.2M. The aim of the project is the construction, of the camera for the first prototype of the SCT telescope made up of 12000 Italian

Collaboration

- 1. Fermi It is a NASA mission launched in 2008 that aims at the study of galactic sources as possible sites of acceleration and injection of Cosmic Rays. Active engagement in the reconstruction of the low-energy break in the spectrum of Young Supernovae Remnants, as an indication of the production of the gamma-ray spectrum from the decay of the neutral pions. Development of analysis tools for the study of extended sources by means of ML techniques (Remnants of SuperNovae), In the period 2011-2012 INTERNATIONAL SCIENTIFIC COORDINATOR of the galactic sources working group. In the period 2000-2008 Participation in the construction and testing of the silicon tracker system. Responsible for the definition of the tracker "Space Characterization" test procedures, execution of tests and data analysis; 2. CTA (Cerenkov Telescope Array http://www.cta-observatory.org/) for very high energy cosmic rays studies and gamma rays and fundamental physics researches. National coordinator and Italian co-PI of the call promoted by the American National Science Foundation (NSF) for the study, characterization and construction of a camera based on Silicon PhotoMultiplier (SiPM) photosensors for the medium-sized doublemirror telescope Schwarzschild-Couder Telescope - SCT
- 3. ADAPT Antarctic Demonstrator for the Advanced Particle-astrophysics Telescope. Participation in a \$ 5M NASA call. ADAPT is a demonstrator for a large APT (Advanced Particle-astrophysics Telescope) scientific mission; 4. HERD The High Energy Cosmic Radiation Detection: Participation in the design and testing of an anticoincidence system based on plastic scintillators read by SiPM 5. INNOVATOR INtersatellite liNk for graVity and ATmOspheRic science, under negotiation

Research Centers CERN; - NASAAmes – California USA; - NASA Goddard Space Flight Center – Washington DC – USA; - SLAC – California USA; - DESY - Zuthen - Germany; - Max Planck Institut für Physik, Munich - Germany; - DARMSTAD -Germany; - BTF- Frascati Italia; - Observatory at Roque de los Muchachos - La Palma island - Spain; - Fred Lawrence Whipple Observatory – Arizona – USA

Bibliometric **Publications** Citations = 39377; h-index = 105; Number of Total publications = 384

1. Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A -Science, 2018, 361(6398), eaat1378; 2. Detection of the characteristic pion-decay signature in supernova remnants - Science, 2013, 339(6121), pp. 807-811; 3. Gamma-ray emission from the shell of supernova remnant W44 revealed by the Fermi LAT - Science, 2010, 327(5969), pp. 1103-1106; 4. Observations of the young supernova remnant RX J1713.7-3946 with the Fermi Large Area Telescope - Astrophysical Journal, 2011, 734(1), 28; 5. Observation of supernova remnant IC443 with the fermi large area telescope **Astrophysical Journal**, 2010, 712(1), pp. 459-468; 6. A cocoon of freshly accelerated cosmic rays detected by fermi in the cygnus superbubble -Science, 2011, 334(6059), pp. 1103-1107; 7. THE FIRST FERMI LAT SUPERNOVA REMNANT CATALOG -Astrophysical Journal, Supplement Series, 2016, 224(1), 8. Fermi large area telescope detection of the young supernova remnant tycho - Astrophysical Journal Letters, 2012, 744(1), L2; 9. Fermi-lat discovery of gev gammaray emission from the young supernova remnant cassiopeia A Astrophysical Journal Letters, 2010, 710(1 PART 2); 10. Search for spatially extended fermi large area telescope sources using two years of data -Astrophysical **Journal, 2012**, 756(1), 5

Bari, 11/04/2023 Francesco Giordano

