

Curriculum vitae: Ermanno Pietropaolo

1. **Current position:** University assistant professor (S.C. 02/C1 S.S.D. FIS/06) at the Department of Physical and Chemical Sciences, University of L'Aquila.

e-mail: ermanno.pietropaolo@univaq.it - ermanno.pietropaolo@aquila.infn.it

Scopus ID: [6602076571](#)

ORCID: [0000-0002-6633-9846](#)

Web of Science ResearcherID: [AAQ-7827-2021/](#)

National Scientific Qualification (ASN) as Associate Professor in the SSD FIS/06.

2. Research domain

PE10 Earth System Science – PE10_14 Earth observations from space/remote sensing

PE9 Universe Sciences – PE9_1 Solar and interplanetary physics

Keywords: Solar-Terrestrial Relationships, Instrumentation for space and ground based observatories, Acquisition systems.

3. Professional curriculum

- Since March 1 2002: assistant Professor at the Physics Department of the University of L'Aquila.
- From February 1991 to February 2002: graduate technician at the Geomagnetism and Space Physics Group of the Physics Department of the University of L'Aquila.
- From January 1989 to February 1991: he worked as Technical Assistant at the Geomagnetism and Space Physics Group of the Physics Department of the University of L'Aquila.
- From March 1987 to March 1988, he held a scholarship funded by Digital Equipment SpA to further the development of numerical filtering methods applied to image analysis.

4. Education

In March 1988, he graduated in Physics from the University of L'Aquila with a thesis on 'Shape and size effects and electronic configuration of small metal particles', supervisor Prof. Michele Cini.

5. Bibliometric indicators for publications of scientific articles to date

On the Scopus database: 72 entries, 1551 citations, h-index 20.

On the NASA/ADS database: 147 entries, citations 1369, h-index 19.

On the Google Scholar database: 176 entries, citations 1839, h-index 22.

On the Web of Science database: 91 entries, citations 1365, h-index 18.

6. Positions held in university boards

- Member of the Doctoral Board in "Physical and Chemical Sciences" of the University of L'Aquila - Cycles XXXVII, XXXVI, XXX, and XXIX.
- Member of Committees for PhD thesis defences in Italy
- Member of many selection boards for research grants and permanent positions in Italian Universities.

7. Teaching activities

- Active courses at the Master's degree in Physics - University of L'Aquila

- "Magnetohydrodynamics of astrophysical plasma" - A.Y. 2018/19 to date
- "Space Physics" - A.Y. 2018/19 to date.
- 3 Bachelor and 6 Master thesis supervisor.
- 3 Phd students tutor and 2 PhD thesis supervisor.

8. RESPONSIBILITY IN FINANCED INTERNATIONAL/NATIONAL PROJECTS

1. Project: ASI-INAF ASPIS n. 2020-35-HH.0 "Study activities of the National Space Weather community to populate the ASPIS scientific data centre prototype" *Unique Project Code F89C20000560005*. Title: "Comprehensive spAce wEather Studies for the ASPIS prototype Realization (CAESAR)". Duration: 25 months. Position: responsible for the Working Package 1330. WP1330 is focused on the use of remote observations of the magnetosphere through ground-based geomagnetic field measurements to investigate several aspects of the SW.
2. Person-in-charge of remote control of ARCADE Raman lidar deployed at CTA (Cherenkov Telescope Array) North site. The control has been tested and validated at L'Aquila labs before the deployment at La Palma (Roque de Los Muchachos Observatory), where is operative since 2018.
3. Person-in-charge of remote control and acquisition system of the SEGMA (South European Magnetometer Array) network, consisting of 4 stations located at Castello Tesino (TN), Ranchio (FC), L'Aquila (AQ), and Nagysenk (Sopron - Hungary)
4. Co-I for the SWA (Solar Wind Analyzer) instrument suite on board the ESA/NASA Solar Orbiter mission. SWA consists of a suite of sensors that will measure the solar wind's bulk properties, such as density, velocity and temperature. It will also measure the composition of the solar wind.
5. Associate scientist for the METIS instrument onboard the ESA/NASA Solar Orbiter mission.
6. Co-I for the ADAHELI (Advanced Astronomy for HELIOphysics) Mission as expert of Solar Physics, data analysis, solar wind. ADAHELI is an Italian Space project for the investigation of solar photospheric and chromospheric dynamics, via high-resolution spectro-polarimetric observations in the near-infrared spectral range. The mission has been financed for phase A study in the framework of ASI Italian Space Agency Small Missions Program call of September 2007.

9. Scientific participation in international and national research projects characterized by competitive calls

- Project: PRIN 2017 prot. 2017APKP7T_004 ERC sector PE10. Title: "CEI6: Circumterrestrial Environment: Impact of Sun-Earth Interaction". Duration: 36 months. Position: unit member.
- Project: PRIN 2012 prot. 2012P2HRRCR_002 sector ERC PE9. Title: "The active sun and its effects on space and earth climate". Duration: 36 months. Position: unit component.
- Project: FP7-SPACE-2010-1 Project number 263218. Title: "PLASMON-A new, ground-based data assimilative modeling of the Earth's plasmasphere - a critical contribution to Radiation Belt modeling for Space Weather purposes". Position: Member of the UNIVAQ unit within Working Package 2.
- Project: PRIN 2007 prot. 2007YF8H8M_003 area 02. Title: "Realization of a wavefront corrector for a large aperture etalon". Duration: 24 months. Position: unit component.

- Project: PRIN 2004 prot. 2004022109_004 area 02. Title: "Sun-Earth relations: dynamics of the Earth's magnetosphere". Duration: 24 months. Position: unit component.
- Project: PRIN 2002 prot. 2002024241_002 area 02. Title: "Dynamic aspects of the Earth's magnetosphere". Duration: 24 months. Position: unit component.

10. **Other scientific/research/organization activities**

- More than 100 contributions to scientific meetings
- Journal reviewer for Journal of Geophysical Research, Advances in Space Research, Remote sensing.
- Among the organizers of the II Congress of Italian Solar Physics "Recent Results of the Italian Solar Research" at the Castello Cinquecentesco of L'Aquila, is a member of the LOC and Editor of the Congress Proceedings (Memorie SAIt, Vol.72).
- Member of the LOC and Editor of the Congress Proceedings of the international congress "THEMIS and the New Frontiers of Solar Atmosphere Dynamics" 19-21 March 2001, Rome, Italy
- Member of the LOC of the 3rd National Conference "Plasma Physics in Italy", L'Aquila 20-22 May 2002.
- Member of the LOC of the international meeting 2nd Dynamo Thinkshop in Rome, Department of Physics, University of Rome Tor Vergata, November 25-26, 2019.
- Member of the LOC of the Meeting "Sun and Society" within the SOLARNET International Conferences. <https://www.science-media.org/cid/solarnet5> , Venice, October 5-9 2020. Due to COVID, this event has been postponed to 2023