



Full Professor of Experimental Physics of Fundamental Interactions.  
Dipartimento di Scienze Fisiche e Chimiche – Università degli Studi dell'Aquila

#### **RESEARCH HIGHLIGHTS.**

His main interests are/were in LIDAR remote sensing and its applications for atmospheric physics: calibration and validation of ozone and aerosol satellite observations, study of polar stratospheric clouds and ozone layer, tropospheric aerosol optical properties, tropospheric clouds, atmospheric monitoring for ultra-high energy cosmic ray detection, LIDAR networks.

He is co-author and/or author of more than 200 papers published in peer reviewed Journals;

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He has a long experience in participating to the management and coordination phases of national and international research projects, as UARS/NASA, SPADE/NASA, E-LITE/NASA/ESA, EASOE/European Commission, SESAME/European Commission, APE-GAIA/European Commission, EARLINET/European Commission, ENVISAT-cal-val/ESA, AUGER/INFN, AirFly/INFN, LISA/CNISM/BRIT-China, CTA-R&D/INFN, ACTRIS/European Commission, ACTRIS-ITA/MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca)-PON, StratOzone/MATTM (Ministero dell'Ambiente e della Tutela del Territorio e del Mare) and MTE (Ministero della Transizione Ecologica). He was involved as "science team member" or "principal investigator" in more than 43 projects and research contracts, evaluated, approved and funded by international and national institutions (NASA, ESA, European Commission, ASI, INFN, MIUR and MATTM of Italian Government). In particular, in the last 11 years (2011-2021), the amount of research funds obtained (after competitive evaluation) by Vincenzo Rizi for the participation, and the coordination of scientific projects is, in summary:

about 240 k€ - projects European Commission (EARLINET, EARLINET-ASOS, ACTRIS e ACTRIS2);

about 260 k€ - projects in Group 2 and 5 of INFN (AUGER, AirFLY, AMY, CTA R&D);

about 940 k€ - scientific agreements with MATTM/MTE (Italian Government, action Stratospheric Ozone);

Recently, the unity coordinated by Vincenzo Rizi has got a support of about 800 k€ (MIUR-PON infrastrutture) to qualify the Osservatorio Atmosferico of CETEMPS/DSFC as one of the focal points of the European Research Infrastructure ACTRIS, which is part of the roadmap ESFRI-EU.

His editorial and reviewer activity was quite extended:

- reviewer for several scientific journals, i.e. Journal of Geophysical Research, Journal of Atmospheric and Oceanic Technology, Journal of Atmospheric and Solar-Terrestrial Physics, Atmospheric Environment, Quarterly Journal of Royal Meteorological Society, Boundary Layer Meteorology, Atmospheric Chemistry and Physics, Applied Optics, Applied Physics B, Journal of Applied Remote Sensing, Journal of Molecular Spectroscopy, Journal of Aerosol Science, European Physical Journal, Optics Communications, Journal of Nanoparticle Research, Geoscience and Remote Sensing Letters.

- reviewer of several scientific proposals for Italian and international institutions, i.e. Belgian Government (OSTC), Centro Internazionale Crocevia, National Environment Research Council - UK, ARM-NSF-USA, PRIN and FIRB – MIUR-Italy. Reviewer for GEV02/VQR/ANVUR, Aix-Marseille excellence initiative A\*Midex, SIR – MIUR-Italy, Rita Levi-Montalcini grants.

He was also member of a number of commissions/committees for the selection of scientific and technical personnel, Ph.D. exams, etc., for several Italian Institutions (University, Research centers). He was also a member, and in few cases the director, of scientific committees of a number of International conferences: International Summer School on Atmospheric and Oceanic Science, Air Fluorescence Workshops, SPIE-RS09-LIDAR, International Symposium on Tropospheric Profiling. He was also nominated National representative at several WMO - Ozone Research Manager meetings, and he was member of the Scientific Assessment Panel for the early stage of 2010, 2014 and 2018 UNEP/WMO Ozone assessments.

#### **TEACHING HIGHLIGHTS.**

His teaching activity, along the last 28 years (A.A. 1993/1994 - A.A. 2020/2021), has included: first-years Classical Physics courses (Mechanics, Thermodynamics and Electromagnetism), Atmospheric Physics courses (also in Ph.D. programs), advanced courses concerning the Didactics of Physical and of Geophysical issues, Laboratory of Electromagnetism and Optics, Laboratory of Nuclear and Astro-particle Physics and Laboratory of Atmospheric Science. He was responsible of about 60 courses (a mean of about 2 courses per academic year, and about 3710 hours of frontal lectures, including exercise and problem solving lectures and tests. He has also given seminars and short courses on different topics (concerning, for example, LIDAR techniques and atmospheric/cosmic ray applications; major atmospheric problems: ozone depletion, climate change; and physics of cycling, conventional observations of the terrestrial atmosphere) from secondary school to Ph.D. course level. He was supervisor of 39 theses (first and second levels University degrees in Physics and Engineering, PhD thesis in Physics).

#### **MANAGEMENT ACTIVITIES.**

He was member of a huge number of commissions/committees/boards for several Italian Institutions (University, Research centers). He was part of several commissions for the PhD admission exams, and final theses evaluation mainly

in the SSD FIS/01 – Experimental Physics of fundamental interactions and FIS/06 – Physics of the Earth and of the Circumterrestrial Medium. He was a member, and in few cases the director, of scientific committees of a number of International conferences: i.e., International Summer School on Atmospheric and Oceanic Science, Air Fluorescence Workshops, SPIE-RS09-LIDAR, International Symposium on Tropospheric Profiling.

He was also nominated National representative at several WMO - Ozone Research Manager meetings, and he has taken part to the Scientific Assessment Panel for the early stage of 2010, 2014 and 2018 UNEP/WMO Ozone assessments. Vincenzo Rizi is the Deputy Director of the Center of Excellence (<http://cetemps.aquila.infn.it/>) CETEMPS (2016 – present): in the period October 2018 – October 2021 he was the Chair of the Study Board in Physics at University of L'Aquila.

The complete lists of scientific papers, books, conference proceedings, reports, notes, contributions to books, and a summary of projects and research contracts, reviewer and editorial activities, and scientific organization and committees, as well as of teaching activities can be requested to **[vincenzo.rizi@univaq.it](mailto:vincenzo.rizi@univaq.it)** or **[vincenzo.rizi@aquila.infn.it](mailto:vincenzo.rizi@aquila.infn.it)**.