

## Curriculum Vitae

PERSONAL INFORMATION	1
	<ul> <li>ISAC-CNR, Via Fosso del Cavaliere 100, 00133, Rome, Itlay</li> <li>+39 0649934344 + +49 3334918950</li> <li>m.campanelli@isac.cnr.it</li> <li>Skype monica.campanelli</li> <li>Sex Female   Date of birth 13/01/1969   Nationality Italian</li> </ul>
POSITION	Researcher
STUDIES APPLIED FOR	Physics PhD
FIELD OF RESEARCH	Remote sensing of atmospheric Essential Climate Variables through solar radiation-based techniques
WORK EXPERIENCE	
1999 – Present	<ul> <li>Researcher</li> <li>Institute of Atmospheric Sciences and Climate, National Research Council (ISAC-CNR)</li> <li>Study of atmospheric aerosol properties and solar radiation by means of radiometers and radiative transfer models</li> </ul>
Sept. 2004 –Nov. 2004	<ul> <li>Postdoctoral Fellowship</li> <li>CARTEL, University of Sherbrooke, Canada</li> <li>Comparison of CIMEL radiometers data acquired during the Quebec forest fires of 2002 with the optical output of the MAQNet air quality model</li> </ul>
Sept 2000	Guest Research CCRS, University of Tokyo • Study of the Skyrad atmospheric radiative transfer model.
EDUCATION AND TRAINING	
Jun 2004	Physics PhD Università de L'Aquila, L'Aquila, Italy.

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	Università de L'Aquila, L'Aquila, Italy.
April 1997	Title of the Thesis: "Characterization of urban and extra-urban aerosol by means of ground and space remote sensing techniques <b>Physics Degree</b> Università di Roma La Sapienza,Rome, Italy Courses: Physics of the earth, geomagnetism, meteorology, geophysics prospecting, seismology. Title of the Thesis: "Determination of atmospheric aerosol characteristics by measurements of sky radiation
July 1991	Diploma National Dance Academy, Rome, Italy - Courses: Ballet, Contemporary dance, Flamenco
July 1987	Diploma di maturità Scientifica Pontificia Scuola Pio IX, Rome, Italy • Main Courses: Mathematics, Physic, Italian Literature, Latin



<b>RESEARCH ACTIVITIES</b>	
	Remote sensing of atmospheric Essential Climate Variables through solar radiation-based techniques and satellite observations.
Responsibilities:	Chair of the International SKYNET Commette ( <u>https://www.skynet-isdc.org</u> ) PI of the European Skynet Radiometers network, ESR, ( <u>www.euroskyrad.net</u> ) PI of the AERONET site Rome-Sapienza by the BAQUNIN supersite at Sapienza University Local operator of the Pandonia site Rome-TorVergata by the BAQUININ site at ISAC Rome Editor of the AMT Journal, Special issue "SKYNET – the international network for aerosol, clouds, and solar radiation studies and their applications".
Activities in Relevant Projects:	Partner in the H2020, EURAMET, EMPIR, project: Metrology for aerosol properties (2020-2023). Collaborator in the BAQUNIN project Boundary-layer Air Quality-analysis Using Network of Instruments (2019-2021) . Partner in QUATRAM, QUAlity and TRaceabiliy of Atmospheric aerosol Measurements (2018-2019) Collaborator in the IDEAS+/SER/SUB/24 Sensor performance, product and algorithms maintenance and operations of the earth observation payload data system (2017) Fellowship funded by MIUR/FISR AEROCLOUDS (2005-2009) Fellowship funded by ASI-QUITSAT (2006-2009)
Relevant Measurement	
Campaigns:	Organizer of the QUATRAM 1,2,3 Campaigns ( <u>www.eurosskyrad.net/quatram.html</u> ) (2019-2021) Participant at the PRE-TECT campaign (http://pre-tect.space.noa.gr) funded by ACTRIS infrastructure, Crete (2017). Participant at the EMERGE campaign, Rome. ( <u>http://www.iup.uni-bremen.de/emerge/home/inter IT.html</u> ) (2017). Participant at the Davos FRC IV and V intercomparison Campaigns (2015; 2021). Organizer of the URBS Rome Intensive Campaign for the optical and chemical characterization of urban aerosol (2011).
Teaching activities:	Organizer of the Solar Radiation Based Established Techniques for aTmorferic Observations (SORBETTO 1 and 2, http://sorbetto2.artov.isac.cnr.it) summer schools (2018; 2021). International Training Course for new ESR's users. ISAC-Rome (2014). Training Course held at Arpa (Regional Agency for Environment) Valle d'Aosta on installation, use and admission of a new PREDE skyradiometer to ESR network Training courses held at Reparto di Sperimentazioni di Meteorologia Aeronautica di Vigna di Valle (ReSMA) (Military Air Army) on solar photometry, for atmospheric aerosol studies by using skyradiometers
ADDITIONAL INFORMATION	_
personal skills:	Languages: Italian: mother tongue; English: good reading/ writing/spoken. Computer knowledge: Operating Systems: Windows, Linux Programming Languages: Fortran 77/90, Matlab
other interests:	<ul> <li>2018: Author: "Balletto discorso in merito, il metodi dell'allievo cosciente". Edicampus edition.</li> <li>1999 – 2006: Ballet dancer in the ballet company Mimma Testa. Performances in some Italian theatres.</li> <li>1987-2000: Ballet Student at the National dance Academy; National Dance Academy graduate ; National Dance Academy specialization course</li> <li>1992-1994: Organizers and choreographer for Valtur tourist villages</li> </ul>



## **Curriculum Vitae**

Publications

- 1. Aerosol optical characteristics in the urban area of Rome, Italy, and their impact on the UV index. M.Campanelli et al., AMT, amt-2019-300, 2022.
- 2. A wide-ranging investigation of the COVID-19 lockdown effects on the atmospheric composition in various Italian urban sites (AER–LOCUS), M Campanelli, et al., Urban Climate 39, 100954, 2021.
- 3. Overview: On the transport and transformation of pollutants in the outflow of major population centres–observational data from the EMeRGe European intensive operational period, MD Andrés Hernández, et al., 2021, Atmospheric Chemistry and Physics Discussions, 1-81, 2021.
- 4. Optimal use of the Prede POM sky radiometer for aerosol, water vapor, and ozone retrievals, R Kudo, et al., Atmospheric Measurement Techniques 14 (5), 3395-3426, 2021.
- 5. On the effect of sea breeze regime on aerosols and gases properties in the urban area of Rome, Italy A Di Bernardino et al., Urban Climate 37, 100842, 2021.
- 6. Impact of synoptic meteorological conditions on air quality in three different case studies in Rome, Italy, A Di Bernardino et al., Atmospheric Pollution Research, 2021.
- 7. An overview of and issues with sky radiometer technology and SKYNET, Teruyuki Nakajima, Monica Campanelli, et al., Atmos. Meas. Tech., 13, 4195–4218, 2020.
- 8. Aerosol optical characteristics in the urban area of Rome, Italy, and their impact on the UV index, M Campanelli, et al., Atmospheric Measurement Techniques Discussions, 2019.
- 9. Transport of Po Valley aerosol pollution to the northwestern Alps–Part 2: Long-term impact on air quality, H Diémoz, et al.,- Atmospheric Chemistry and Physics, 2019.
- 10. Transport of Po Valley aerosol pollution to the northwestern Alps-Part 1: Phenomenology, H Diémoz, et al., Atmos. Chem. Phys 19, 3065-3095, 2019.
- 11. Long-term (1995–2018) aerosol optical depth derived using ground based AERONET and SKYNET measurements from aerosol aged-background sites, SS Ningombam, et al., Atmospheric Pollution Research, 2019.
- 12. Comparisons of spectral aerosol single scattering albedo in Seoul, South Korea; J. Mok, et al., Atmospheric Measurement Techniques, 11, 2018.
- 13. Precipitable water vapour content from ESR/SKYNET sun–sky radiometers: validation against GNSS/GPS and AERONET over three different sites in Europe, M Campanelli, et al., Atmospheric Measurement Techniques 11 (1), 81, 2018.
- 14. Results from the Fourth WMO Filter Radiometer Comparison for aerosol optical depth measurements, S. Kazadzis, et al., Atmos. Chem. Phys., 18, 3185-3201, 2018.
- Comparison of hourly surface downwelling solar radiation estimated from MSG–SEVIRI and forecast by the RAMS model with pyranometers over Italy, S Federico, et al., Atmospheric Measurement Techniques 10 (6), 2337, 2017.
- 16. Factors for inconsistent aerosol single scattering albedo between SKYNET and AERONET, P Khatri, et al., Journal of Geophysical Research: Atmospheres 121 (4), 1859-1877, 2016.
- 17. Calibration of a Sky radiometer (Prede) using observations obtained from Hanle and Merak highaltitude stations in Ladakh, SS Ningombamet al., Atmospheric research 143, 118-128, 2014.
- Retrieval of characteristic parameters for water vapour transmittance in the development of ground based sun-sky radiometric measurements of columnar water vapour, M Campanelli, et al., Atmospheric Measurement Techniques, 2014, num. 7, p. 1075-1087, 2014.
- 19. One Year of Measurements with a POM-02 Sky Radiometer at an Alpine EuroSkyRad Station, H Diémoz, et al., Journal of the Meteorological Society of Japan. Ser. II 92, 1-16, 2014.
- Columnar aerosol properties in a Northeastern Atlantic site (Plymouth, United Kingdom) by means of ground based skyradiometer data during years 2000–2008, V Estellés, et al., Atmospheric environment 61, 180-188, 2012.
- 21. Comparison of AERONET and SKYRAD4.2 inversion products retrieved from a Cimel CE318 sunphotometer", V Estellés, et al., Atmos. Meas. Tech., 5, 1–11, 2012.
- 22. Monitoring of Eyjafjallajökull volcanic aerosol by the new European Skynet Radiometers (ESR) network, M Campanelli, et al., Atmospheric environment 48, 33-45, 2012.
- 23. Development of a new data-processing method for SKYNET sky radiometer observations, M Hashimoto, et al., Atmospheric Measurement Techniques 5 (11), 2723-2737, 2012.
- 24. Evaluation of the new ESR network software for the retrieval of direct sun products from cimel ce318 and prede pom01 sun-sky radiometers, V Estellés, et al., Atmospheric Chemistry and Physics, 11619-11630, 2012.



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Publications

- 25. Summertime columnar content of atmospheric water vapor from ground based Sun sky radiometer measurements through a new in situ procedure, M Campanelli, et al., Journal of Geophysical Research: Atmospheres 115 (D19), 2010.
- AERONET and Euroskyrad (ESR) aerosol optical depth intercomparison on Cimel CE318 and Prede POM01 radiometers, V Estellés et al., Remote Sensing of Clouds and the Atmosphere XV 7827, 78270Y, 2010.
- 27. Performance of a FieldSpec spectroradiometer for aerosol optical depth retrieval: method and preliminary results, C Bassani, et al., Applied optics 48 (11), 1969-1978, 2009.
- 28. Aerosols in polar regions: A historical overview based on optical depth and in situ observations, C. Tomasi, et al., Journal of Geophysical Research: Atmospheres 112 (D16), 2007.
- 29. Columnar aerosol properties in Valencia (Spain) by ground based Sun photometry, V Estellés, et al., Journal of Geophysical Research: Atmospheres 112 (D11), 2007.
- Application of the SKYRAD Improved Langley plot method for the in situ calibration of CIMEL Sun-sky photometers, M Campanelli, et al., Applied optics 46 (14), 2688-2702, 2007.
- Evaluation of the GEM-AQ air quality model during the Quebec smoke event of 2002: Analysis of extensive and intensive optical disparities, NT O'Neill, et al., Atmospheric Environment 40 (20), 3737-3749, 2006.
- Retrievals of Antarctic aerosol characteristics using a Sun sky radiometer during the 2001 -2002 austral summer campaign, C Di Carmine, et al., Journal of Geophysical Research: Atmospheres 110 (D13), 2005.
- Determination of the solar calibration constant for a sun-sky radiometer: proposal of an in-situ procedure, M Campanelli, et al., Applied optics 43 (3), 651-659, 2004.
- 34. Intercomparison between aerosol characteristics retrieved simultaneously with a Cimel and Prede sun-sky radiometers in Rome (Tor Vergata AERONET site), M Campanelli, et al., Optica Pura y Aplicada 37, 3159-3164, 2004.
- 35. On the correlation between the depth of the boundary layer and the columnar aerosol size distribution, M Campanelli, et al., Atmospheric Environment 37 (32), 4483-4492, 2003.
- 36. Experimental errors in sun-sky radiometer measurements, M Campanelli, et al., Atmospheric Radiation Measurements and Applications in Climate 4815, 82-89, 2002.
- Physical features of the atmospheric aerosol determined with an aureolemeter and a FSSP probe in the Mediterranean Lampedusa island, M Campanelli, et al., Atmospheric Environment 35 (21), 3607-3618, 2001.
- Calibration and data elaboration procedure for sky irradiance measurements, P Boi, et al., Applied optics 38 (6), 896-907, 1999.