

Cairo, Francesco:

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1. EDUCATION

- 2012 Master (II level) in Scientific Computing, University of Rome "La Sapienza", Italy, with a vote of 110/110 with honours, supervisor prof. C. Cammarota.
- 2000 Professional PhD in Optics, University of Florence, Italy, with a vote of 70/70 with honours.
PhD Supervisor prof. F. Francini
- 1995 Specialization course in Physics, University of Rome "La Sapienza", Italy.
- 1992 Laurea degree in Physics, University of Rome "La Sapienza", Italy, with a vote of 110/110

2. CURRENT POSITION(S)

- 2019 –to-date Research Director
Institute of Atmospheric Sciences and Climate, National Research Council, Italy.
- 2012 – to-date Contract Professor
Department of Physics, Università degli Studi “Tor Vergata”, Italy.

3. PREVIOUS POSITION(S)

- 2010 – 2019 Senior Scientist
Institute of Atmospheric Sciences and Climate, National Research Council, Italy.
- 2001– 2010 Scientist
Institute of Atmospheric Sciences and Climate, National Research Council, Italy.
- 1997-2001 Scientist
Institute of Physics of the Atmosphere, National Research Council, Italy.
- 1993-1997 Research Fellow
Institute of Physics of the Atmosphere, National Research Council, Italy.

4. CAREER BREAKS (if applicable)

- None

5. RELEVANT ACHIEVEMENTS IN THE LAST 5 YEARS

(Projects, Institutional roles, Roles, Teaching, supervision of students, editorial boards, awards,.....)

- 2014-2019 Deputy Director of ISAC-CNR in charge of the Rome Section of the Institute.
- 2017–2018 Contract Professor – GeoFluid Dynamics course, University of Rome “Tor Vergata”, Italy.
- 2018 Visiting Scientist at the Max Plank Institute for Chemistry, Mainz, Germany
- 2015-to-date Member of the International Association for Meteorology and Atmospheric Sciences national group
- 2012–to-date 2 Postdocs/ 2 PhD students/ 5 Master Students / 8 Bachelor Students
Name of Faculty/ Department/ Centre, Name of University/ Institution/ Country
- 2012– to-date Contract Professor – Physics of the Atmosphere course, University of Rome “Tor Vergata”, Italy.
- 2016 – to-date National representative in the Steering Committee of the Network for the Detection of Atmospheric Composition Changes, endorsed by national and international scientific agencies, including the United Nations Environment Program (UNEP) and the International Ozone Commission of the International Association of Meteorology and Atmospheric Sciences.
- 2017– to-date CNR representative in the AISBL European Facility for Airborne Research.
- 2018 –to-date Scientific Advisory Board, HEMERA2020 Research Infrastructure for tropospheric and stratospheric balloon-borne research year – Review panel member, Name of University/ Institution/ Country
- 2019 – to-date CNR representative and Chair of the Antarctic Station Dome Concordia scientific committee
- 2019-to-date Co-Investigator, and member of the CNR working groups for project “Volo Suborbitale”
- 2019-to-date Co-Investigator, and member of the CNR working groups for project

“Aviolancio”

2019-to-date Principal Investigator, and member of the CNR working groups for project “Piattaforme Stratosferiche”

6. RELEVANT PUBLICATIONS (Max 10 publications)

Complete list at: <https://scholar.google.it/citations?user=oZY24B8AAAAJ&hl=it>.

1. Nitric acid trihydrate (NAT) in polar stratospheric clouds, C Voigt, J Schreiner, A Kohlmann, P Zink, K Mauersberger, N Larsen, F. Cairo, ..., Science 290 (5497), 1756-1758, 2000.
2. Unprecedented evidence for deep convection hydrating the tropical stratosphere, T Corti, BP Luo, M De Reus, D Brunner, F Cairo, MJ Mahoney, G Martucci, ..., Geophysical Research Letters 35 (10), 2008.
3. Comparison of various linear depolarization parameters measured by lidar, F Cairo, G Di Donfrancesco, A Adriani, L Pulvirenti, F Fierli, Applied Optics 38 (21), 4425-4432, 1999.
4. Tropical stratospheric aerosol layer from CALIPSO lidar observations, JP Vernier, JP Pommereau, A Garnier, J Pelon, N Larsen, J Nielsen, F. Cairo,..., Journal of Geophysical Research: Atmospheres 114 (D4), 2009.
5. MIPAS detects Antarctic stratospheric belt of NAT PSCs caused by mountain waves, M Höpfner, N Larsen, R Spang, BP Luo, J Ma, SH Svendsen, F. Cairo, ..., Atmospheric chemistry and physics 6 (5), 1221-1230, 2006.
6. Spectroscopic evidence for NAT, STS, and ice in MIPAS infrared limb emission measurements of polar stratospheric clouds, M Höpfner, BP Luo, P Massoli, F Cairo, R Spang, M Snels, ..., Atmospheric Chemistry and Physics 6 (5), 1201-1219, 2006.
7. Chemical and aerosol characterisation of the troposphere over West Africa during the monsoon period as part of AMMA, CE Reeves, P Formenti, C Afif, G Ancellet, JL Attié, J Bechara, A Borbon, F. Cairo, ..., Atmospheric Chemistry and Physics 10 (16), 7575-7601, 2010.
8. Ultrathin tropical tropopause clouds (UTTCS): I. Cloud morphology and occurrence, T Peter, BP Luo, M Wirth, C Kiemle, H Flentje, VA Yushkov, V Khattatov, F Cairo, ..., Atmospheric Chemistry and Physics 3 (4), 1083-1091, 2003
9. Thresholdless microlaser, F De Martini, F Cairo, P Mataloni, F Verzegnassi, Physical Review A 46 (7), 4220, 1992.
10. Polar stratospheric clouds: Satellite observations, processes, and role in ozone depletion, I Tritscher, MC Pitts, LR Poole, SP Alexander, F Cairo, MP Chipperfield, ... Reviews of geophysics 59 (2), e2020RG000702, 2021.