# Curriculum Vitae: Maria Gerontidou, PhD

- Work: Faculty of Physics, Nuclear and Elementary Particle Section, Bulding V, National and Kapodistrian University of Athens, University Campus, Zografos 157 72, Greece Phone: 0030 210 7276-6886/ 6974012003
- e-mail : <u>mgeront@phys.uoa.gr</u>
  Web-page: <u>http://users.uoa.gr/~mgeront</u>, <u>http://cosray.phys.uoa.gr</u>
  Google Citations: <u>https://scholar.google.com/citations?user=Otte5sEAAAAJ</u>
- Home: Kekropos 34, 16675 Glyfada, Athens, Greece

## Education

- 2007: Doctor of Philosophy (Ph.D.) in Science, National and Kapodistrian University of Athens, Greece
- **1999:** Master of Science (MSc) in Nuclear and Particle Physics, National and Kapodistrian University of Athens, Greece
- 1996: Bachelor of Science (BSc), Physics Department, National and Kapodistrian University of Athens, Greece

# **Professional Positions**

**2014** – **Present:** Laboratory Teaching Staff (E.DI.P.) in field of expertise *"Experimental Physics of Elementary Particles"* at the Department of Physics, NKUA. Responsibilities include supervising hands-on educational activities in undergraduate general physics, nuclear and particle physics laboratories and bachelors' thesis at the Department of Physics, National and Kapodistrian University of Athens, (NKUA)

**2009** – **2014:** Teaching assignments for physics laboratories exercises in the Undergraduate Program of the Department of Physics, NKUA, under the status of IDAX (permanent contract teaching staff).

**2008** – **2009**: Postdoctoral researcher specializing in solar energetic particles and their impact on space radiation at the Nuclear and Particle Physics Department, Faculty of Physics, NKUA, with funding from the IKY State Scholarship Foundation.

**2007** – **2009:** Scientific collaborator in the Nuclear Physics and Elementary Particles Division of the Department of Physics, NKUA.

**2003** – **2007:** Instructor in particle and nuclear physics laboratories of the of Physics Department, NKUA, as a PhD candidate.

### Visiting position:

Royal Belgian Institute for Space Aeronomy (BIRA- IASB), Brussels: scientific collaboration within the framework of European Space Agency \_ESA's program on Space Weather Network (2024: *2- month visit*, 2025: *5-day visit*)

## **Research Activity**

#### **Research experience**

**2013** – **Present:** Scientific collaborator of the Royal Belgian Institute for Space Aeronomy (BIRA) as senior member of the Athens Neutron Monitor Station-ANeMoS/NKUA expert group, which contributes to the Expert Service Center for Space Radiation within the Space Weather Network of the European Space Agency (ESA) (<u>https://swe.ssa.esa.int/space-radiation</u>)

**2009** – **Present:** Processing and transmitting corrected cosmic ray data to the Real-Time High-Resolution Neutron Monitor Database (NMDB) (<u>http://www.nmdb.eu</u>).

**2000** – **Present:** Contribution to the operation of the Athens Neutron Monitor Station as a senior Member of the Athens Cosmic Ray Group at the Nuclear Physics and Elementary Particles Division, Department of Physics, NKUA, supporting both fundamental research on cosmic ray physics and its applications

**2000** – **Present:** Managing the database of the Athens Neutron Monitor, ensuring real-time data availability online (<u>http://cosray.phys.uoa.gr/</u>).

**2000:** Engagement in the installation and operation of the Neutron Monitor Detector at the Physics Department of the National and Kapodistrian University of Athens.

#### Summary of Publications

- 107 scientific publications (34 peer review papers and 73 articles in proceedings) \_citations= 1080 and h-index=17 (Google scholar). The average number of authors 6/ publication.
- Google Citations.: <u>https://scholar.google.com/citations?user=0tte5sEAAAAJ</u>

#### Reviewer

Referee for Scientific journals:

- Solar Physics, Journal for Solar and Solar-Stellar Research and the Study of Solar Terrestrial Physics, Springer , Impact Factor 2.961 (2021)
- Space Weather, American Geophysical Union (EGU), Wiley, Impact Factor 3.7
- Universe, peer-reviewed open access journal focused on principles and new discoveries in the universe, MDPI, Impact Factor 2.9
- Fluids, peer-reviewed, open access journal on all aspects of fluids, MDPI, Impact Factor 1.9
- Advance in Space Research, official Journal of the <u>Committee on Space Research (COSPAR)</u>, an interdisciplinary scientific committee of the <u>International Science Council (ISC)</u>, Impact Factor 2.8

#### **Research Programs**

**1997-Present:** Engaged in 12 funded research projects across international and Greek initiatives, all successfully completed.

#### Collaborations

• Royal Belgian Institute for Space Aeronomy BIRA, Brussels, Belgium (Scientific collaboration within the ESA SSA program, resulting in > 10 joint publications)

- INAF-IFSI, Rome Italy (Scientific collaboration within the Neutron Monitor Database Network, resulting in 8 joint publications)
- Observatoire de Paris, France (Scientific collaboration within the Neutron Monitor Database Network, resulting in 1 joint publication)
- Christian Albrechts Universitat zu Kiel, Germany (Collaboration on scientific and technological topics, involving numerous technical meetings and one joint publication)
- Physicalisches Institut of Bern -Switzerland (Scientific collaboration within the Neutron Monitor Database Network, resulting in 3 joint publication)
- Institute of Terrestrial Magnetism, Ionosphere and Radiowaves (IZMIRAN) Russian Academy of Sciences (Long-term collaboration on scientific and technological topics, involving numerous exchange visits, over 30 joint publications)
- Institute of Nuclear Physics Moscow State University (Lomonosov)(Scientific collaboration, resulting in 5 joint publications)
- Israel Cosmic Ray and Space Weather Center Emilio Segre Observatory (ESOI) (Scientific collaboration within the Neutron Monitor Database Network, resulting in 2 joint publications)
- Institute of Experimental Physics Slovak Academia of Science- Slovakia (Scientific collaboration within the Neutron Monitor Database Network, resulting in 5 joint publications)
- Sodankyla Geophysical Observatory University of Oulu –Finland (Scientific collaboration within the Neutron Monitor Database Network, resulting in 3 joint publications)
- Alikhanyan Physics Institute Cosmic Ray Division Armenia (Scientific collaboration within the Neutron Monitor Database Network, resulting in 2 joint publications)
- Space Environment Center, NOAA, Boulder-U.S.A. (Scientific collaboration, resulting in 2 joint publications)

## Conferences

- Participation in >40 conferences with oral and poster contribution.
  - Member of Organizing Committee for 11 Conferences. The most recent are:
    - NMDB2025: "Cosmic Ray studies with Neutron Detectors", 19-21March, Athens, Greece (LOC and SOC member)
      - NMDB@Athens, Athens / hybrid, 26.–30.09.2022
      - NMBD Meeting 05-07 March, Greece, 2019
      - SSA P3-SWE-XXIII User Requirements for the Mediterranean Region" ESA ITT A0/1-9408/18/D/CT (SWE MED) Greek Workshop 23.09.2019

## Teaching

**2021** – **Present:** Undergraduate course "*Astroparticle Physics and Cosmic Rays*" at the Department of Physics, National and Kapodistrian University of Athens (NKUA).

**2020** – **Present:** Course *"Cosmic Rays"* in the Master's Program in Nuclear Physics and Elementary Particles at the Department of Physics, NKUA.

**2018** – **Present:** Course "Space Weather effects on human health and technological systems" in the Master's Program of the Medical School of NKUA, *"Environment and Health: Management of Environmental Issues with Health Impacts."* 

**2010** – **Present:** Supervision of twelve (12) undergraduate thesis projects for students of the Department of Physics, NKUA.

**2009:** Supervision and organization of a laboratory exercise for the International Summer School titled *"Cosmic Rays and Neutron Monitors – A Training Course in Science and Applications"*, organized by the Cosmic Ray Group of the University of Athens in Athens from September 14–19, 2009, within

the framework of the European program *FP7-High Resolution Neutron Monitor Database*. The school was attended by PhD candidates, postdoctoral researchers, and engineers from 18 countries.

### Skills

Language skills:

- English: Certificate of Proficiency in English\_ECPE, Michigan Language Assessment (C2)
- French: Diplôme d'études supérieures (C2)
- Deutsch: Zertifikat, Goethe Institut (B1)