



HELLENIC REPUBLIC

National and Kapodistrian University of Athens

Department of Physics

Section of Astrophysics, Astronomy, and Mechanics



Apostolos Mastichiadis

Title: **Professor**

Section: **Astrophysics, Astronomy, and Mechanics**

Phone: **+30 210 7276909**

Fax: **+30 210 727 6753**

Email: **amastich@phys.uoa.gr**

Academic Qualifications:

- Diploma in Physics, National and Kapodistrian University of Athens, 1979
- M.Sc. in Astronomy, Sussex University, UK, 1980
- Ph.D. in Astronomy, Boston University, 1985

Appointments:

- 1985-1986 Postdoctoral Fellow, Theory group, Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany
- 1987-1988 Postdoctoral Fellow, Theory group, Max-Planck-Institut für Extraterrestrische Physik, Garching, Germany
- 1988-1990 Research Associate, Cosmic Ray group, Department of Physics and Mathematical Physics, University of Adelaide, Australia
- 1990-1992 Research Associate, Kosmophysik group, Max-Planck-Institut für Kernphysik, Heidelberg, Germany
- 1992-1993 NAS/NRC Research Associate, NASA/Goddard Space Flight Center, Maryland, USA
- 1993-1997 Research Associate, Kosmophysik group, Max-Planck-Institut für Kernphysik, Heidelberg, Germany
- 1997-2014 Associate Professor, Department of Physics, National and Kapodistrian University of Athens
- 2014-present Professor, Department of Physics, National and Kapodistrian University of Athens

Teaching Activities: (current)

Undergraduate courses

- Stellar Astrophysics
- Stellar Systems and Galaxies
- High Energy Astrophysics

Graduate courses

- High Energy Astrophysics

Supervision:

3 Ph.D. (completed), 1 Ph.D (ongoing)

12 M.Sc. students (completed)

Research Interests/Activities: (last 10 years)

- X-ray and gamma-ray astronomy
- Radiation transfer in high energy sources
- Particle acceleration in SNR, AGN and GRB
- Cosmic Ray Physics
- Neutrino Astrophysics

Scientific Publications/Citations: (August 2013)

- 105 publications in refereed journals
- 1 invited chapter in special volumes
- 84 conference proceedings
- 3244 citations, 2925 excluding self-citations –source NASA ADS <http://adsabs.harvard.edu/>
- h-index 28

Selected publications

- J.G. Kirk, A. Mastichiadis “X-ray flares from runaway pair production in active galactic nuclei”, *Nature* 360, 135, 1992.
- C. D. Dermer, R. Schlickeiser and A. Mastichiadis “High-energy gamma radiation from extragalactic radio sources”, *Astronomy and Astrophysics* 256, L27, 1992
- A. Mastichiadis “On the high energy non-thermal emission from shell-type supernova remnants”, *Astronomy and Astrophysics* 305, L53, 1996.
- A. Mastichiadis and J.G. Kirk “Variability in the synchrotron self-Compton model of blazar emission” *Astronomy and Astrophysics* 320, 19, 1997
- L. Titarchuk, A. Mastichiadis and N. Kylafis “Spherical Accretion X-Ray Spectral Formation in a Converging Fluid Flow: Spherical Accretion into Black Holes”, *Astrophysical Journal* 487, 834, 1997.
- J.G. Kirk, F.M. Rieger and A. Mastichiadis “Particle acceleration and synchrotron emission in blazar jets” *Astronomy & Astrophysics* 333, 452. 1998.
- A. Mastichiadis, D. Kazanas “The Supercritical Pile Model for Gamma-Ray Bursts: The Prompt to Afterglow Evolution”, *The Astrophysical Journal Letters*, 694, L54, 2009
- M. Petropoulou, A. Mastichiadis “Temporal signatures of leptohadronic feedback mechanisms in compact sources”, *Monthly Notices of the Royal Astronomical Society*. 421, 2325, 2012

The full list of publications can be found in Google Scholar: <https://scholar.google.gr/citations?user=xnVTyRMAAAAJ&hl=el&oi=ao>