

CV Mario Edoardo Bertaina

Institution: Department of Physics - University of Torino

- Master Degree in Physics at University of Torino in 1993.
- PhD in Geophysics (consortium Universities of Genova, Modena and Torino) in 1997 correlating the atmospheric muon flux detected by EAS-TOP experiment with the temperature in low stratosphere.
- Post-doc and/or contract researcher from 1997 to 2006 at Massachusetts Institute of Technology (US), Institute of CosmoGeophysics of CNR – Torino (Italy), University of Torino (Italy), RIKEN (Japan) working on astroparticle physics related projects.
- Researcher staff of the University of Torino from 2006 to 2015.
- Associate Professor of the University of Torino since 2015.
- Author of more than 300 publications. According to ISI Web of Knowledge current h-index is 38.

The research activity is mainly in the cosmic ray field participating to the experiments EAS-TOP, LVD, KASCADE-Grande, LOPES, CROME, Auger and JEM-EUSO.

- Regarding the JEM-EUSO program, he is member of the Executive Committee, with the role of Global Analysis Coordinator. He is also responsible of the development of the trigger algorithms, and, locally, coordinator of the JEM-EUSO group in Torino.
- From 2012 to 2019 he has been national coordinator of the JEM-EUSO Project supported by the Italian Ministry of Foreign Affairs.
- From 2021 he is coordinator of a bilateral exchange program CUIA-CONICET related to the Auger Prime project.
- From 2011 to 2015 he has been appointed coordinator of the astro-particle group of INFN Torino, and member of the INFN National Scientific Committee II, devoted to astro-particle physics.
- He has been appointed referee for several international journals such as: Physical Review Letters, Astroparticle Physics, Nuclear Instruments and Methods A, Remote Sensing.
- He is referee for European Agencies such as, Agence Nationale de la Recherche (France), Polish Science Foundation, Swiss National Science Foundation, Italian VQR.

5 most relevant publications:

- 1) S. Bacholle et al. (JEM-EUSO Coll.): "Mini-EUSO Mission to study Earth UV emissions on board the ISS", Astrophysical Journal Supplement Series, 253, Issue 2 (2021) 36.
- 2) A. Aab et al. (Pierre Auger Coll.): "Measurement of the cosmic-ray energy spectrum above 2.5×10^{18} eV using the Pierre Auger Observatory", Physical Review D 102 no.6 (2020) 062005.
- 3) J. Adams et al. (JEM-EUSO Coll.): "An evaluation of the exposure in nadir observation of the JEM-EUSO mission", Astroparticle Physics, Vol.44, Pag.76-90 (2013).
- 4) W.D. Apel et al. (KASCADE-Grande Coll.): "Kneelike Structure in the Spectrum of the Heavy Component of Cosmic Rays Observed with KASCADEGrande", Physical Review Letters 107 (2011) 171104.
- 5) M. Aglietta et al. (EAS-TOP & MACRO Coll.): "The cosmic ray proton, helium and CNO fluxes in the 100 TeV energy region from TeV muons and EAS atmospheric Cherenkov light observations of MACRO and EAS-TOP", Astroparticle Physics, 21 (2004) 223-240.