

Antonio Emolo

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Public profile at Google Scholar: https://scholar.google.com/citations?user=_EcZvPAAAAAJ&hl=it

Current position

From April 2009, Docente di Ruolo di II Fascia (Associate Professor) at the Department of Physics 'E. Pancini' of the University of Naples Federico II

Academics

2017: Award of the National Scientific Qualification from the Italian Ministry of Education, Universities and Research (MIUR) as Full Professor in Italian Universities for the disciplines 02/C1 – Astronomy, Astrophysics, Earth and Planetary Physics

2002: PhD in Geophysics and Volcanology at the University Federico II in Naples

1997: MSc degree in Physics at the University Federico II in Naples

Institutional Assignments

2009-2012: Member of the Science Faculty Council of the University Federico II in Naples

2016-2019: Member of the Council of the Polytechnic and Science School of the University Federico II in Naples

2009-2012 and 2015-2019: Member of the Executive Committee of the Department of Physics 'E. Pancini' of the University Federico II in Naples

2006-2012: Member of the board of the PhD course in Seismic Risk at the University Federico II in Naples

2006-2013: Member of the board of the PhD course in Geophysics at the University Alma Mater Studiorum in Bologna

2013 - present: Member of the board of the PhD course in Structural Engineering, Geotechnics and Seismic Risk at the University Federico II in Naples

Teaching activity

From 2005, Professor of Metodi Inversi (Inverse methods) for the Master in Physics

From 2012, Professor of Fisica generale I (General Physics I) for the Bachelor in Chemistry

From 2017, Professor of 'Metodi inversi in geofisica applicata' for the master in Applied Geophysics at the Centro di Geotecnologie of the University of Siena, San Giovanni Valdarno (Arezzo, Italy)

From 2005, Teaching activity for the PhD program in Physics for the courses 'An introduction to the seismic source' e 'Principles of inverse theory'

From 2003, invited lecturer for short courses on 'Inverse Methods' at the Department of Geophysics of the Charles University in Prague (Repubblica Ceca), Department of Geophysics of the University College of Dublin (Ireland), the Korean Institute of Geosciences and Mineral Resource (South Korea), Dipartimento di

Scienze della Terra e Geoambientali of the University 'Aldo Moro' in Bari (Italy), Dipartimento di Matematica of the University of L'Aquila.

Tutor of 20+ theses for PhD in Geophysics, Phd in Seismic Risk, and bachelor and master in Physics.

Main research topics

- Modeling of seismogenetic processes
- Analysis and inversion of strong motion data for the determination of kinematic characteristics of earthquakes source
- Modeling of seismic radiation produced by extended sources
- Moment tensor and focal mechanism
- Ground-Motion Prediction Equations
- Seismic hazard and scenario studies
- Ground Motion Prediction Equations
- Seismic Early-Warning
- Inverse problems and optimization techniques
- Seismic data analysis
- Seismic instruments

Publication record

50+ Scientific articles, book chapters and conference proceedings

80+ Conference papers

1 Book on Seismology at university level

H-index (Scopus): 19 (last accessed, May 8, 2023)

Total citations (Scopus): 965 (last accessed, May 8, 2023)

H-index (Google Scholar): 22 (last accessed, May 8, 2023)

Total citations (Google Scholar): 1371 (last accessed, May 8, 2023)

i-10 index (Google Scholar): 33 (last accessed, May 8, 2023)

Last 10 publications

Di Maio R., A. Emolo, A. Frisetti, N. Abate, M. La Manna, I. Pierri, R. Salone and S. Tarantino (2023). Reconstruction of archaeological contexts through the integrated use of airborne LiDAR and geophysical survey: The case study of San Pietro Infine (Caserta, southern Italy). Journal of Archaeological Science: Reports, Volume 49, Article number 104013, doi: 10.1016/j.jasrep.2023.104013.

Adinolfi G.M., G. De Landro, M. Picozzi, F. Carotenuto, A. Caruso, S. Nazeri, S. Colombelli, S. Tarantino, T. Muzellec, A. Emolo, A. Zollo and A. Orefice (2023). Comprehensive study of micro-seismicity by using an automatic monitoring platform. Frontiers in Earth Science, Volume 112023, Article number 1073684, doi: 10.3389/feart.2023.1073684.

De Landro G., O. Amoroso, G. Russo, N. D'Agostino, R. Esposito, A. Emolo and A. Zollo (2022). Author Correction: Decade-long monitoring of seismic velocity changes at the Irpinia fault system (southern Italy) reveals pore pressure pulsations (Scientific Reports, (2022), 12, 1, (1247), 10.1038/s41598-022-05365-x). Scientific Reports, Volume 12 (1), Article number 16039, doi: 10.1038/s41598-022-20912-2.

De Landro G., O. Amoroso, G. Russo, N. D'Agostino, R. Esposito, A. Emolo and A. Zollo (2022). Decade-long monitoring of seismic velocity changes at the Irpinia fault system (southern Italy) reveals pore pressure pulsations. *Scientific Reports*, Volume 12 (1), Article number 1247, doi: 10.1038/s41598-022-05365-x.

Picozzi M., F. Cotton, D. Bindi, A. Emolo, G.M. Adinolfi, D. Spallarossa and A. Zollo (2022). Spatiotemporal Evolution of Ground-Motion Intensity at the Irpinia Near-Fault Observatory, Southern Italy. *Bull. Seism. Soc. Am.*, Volume 112 (1): 243–261, doi: 10.1785/0120210153.

Rezaei M.H., N. Khaji, R. Di Maio, and A. Emolo (2021). A modified specific barrier model based on new time functions and approach for cracks location on the fault plane: Application to the 2008 Iwate-Miyagi earthquake. *Geophys. J. Int.*, Volume 227(1): 76–98, doi: 10.1093/gji/ggab212.

Festa G., G.M. Adinolfi, A. Caruso, S. Colombelli, G. De Landro, L. Elia, A. Emolo, M. Picozzi, A. Scala, F. Carotenuto, S. Gammaldi and A. G. Iaccarino (2021). *Geosciences*, Volume 11 (1): 1–24, doi: 10.3390/geosciences11010028.

Michele M., D. Latorre and A. Emolo (2019). An empirical formula to classify the quality of earthquake locations. *Bull. Seism. Soc. Am.*, Volume 109 (6): 2755–2761, doi: 10.1785/0120190144.

Tarantino S., S. Colombelli, A. Emolo and A. Zollo (2019). Quick determination of the earthquake focal mechanism from the azimuthal variation of the initial P-wave amplitude. *Seism. Res. Lett.*, Volume 90 (4): 1642–1649, doi: 10.1785/0220180290.

de Lorenzo S., M. Michele, A. Emolo and A. Tallarico (2017). A 1D P-wave velocity model of the Gargano promontory (south-eastern Italy). *Journal of Seismology*, Volume 21 (4): 909–919, doi: 10.1007/s10950-017-9643-7.