

PAOLO GASPARINI CURRICULUM VITAE

- Dipartimento di Scienze Fisiche
Università di Napoli Federico II
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Present Position:

- Full Professor of Geophysics at the Department of Physical Sciences, University of Napoli Federico II (since 1970);
- President of AMRA Scarl, no-profit public research enterprise owned by University of Napoli Federico II, four Universities and three national research agencies; (since 2005)

Birth location and date:

- Napoli 4th of May 1937

CV

- Graduation with praise in Geological Sciences at the University of Napoli with a thesis on “Radioactivity of the Island of Ischia” (1961)
- Free docence in Earth Physics since 1967
- Italian CNR Fellow at the Institute of Earth Physics of University of Napoli (1962)
- Engineer (1963-64) and Assistant Professor (1964-70) at the INstitute of Earth Physics of University of Napoli
- Full Professor of Geophysics at the University of Napoli since 1970
- Director of the Institute of Earth Physics of University of Napoli (1970-73)
- Director of the Vesuvian Volcanological Observatory (1970-1983)

Positions abroad:

- NATO Fellow at the Department of Geology, Rice University, Houston, Texas, to carry out a project on natural radioactivity and K-Ar geochronology of Italian volcanoes (1967-68)
- Invited Professor at Department of Geology, Rice University, Houston, Texas, to teach “Gamma ray spectrometry and Uranium exploration” (1968-69)
- Research Fellow at Lawrence Radiation Laboratory at Berkeley, California, to carry out a project on “low level natural radioactivity” (1970);
- NTNF Visiting Professor at the Oslo Mineralogisk Geologisk Museum and the Geological Survey of Norway at Trondheim and Bergen to carry out a project on “Isotope Geochemistry and Radioactivity of rocks” (1977)
- FAPESP Visiting Professor at Instituto Astronomico e Geofisico, Universidad de Sao Paulo, Brasile (1978-80)

Further Teaching activities

- Geophysics class at Scuola Normale di Pisa (1973-75)
- Seismology class at Instituto Nacional de Sismologia de Venezuela, Caracas (1976)
- Seminars on Geophysical methods of volcano monitoring, UNESCO School on volcanic risk, Capelinhos, Acores, (1977)
- Classes of Geophysical Methods for Geothermal Exploration, UNDP-IILA School, Manizales (Colombia) (1983)
- Coordinator of the Ph.D. course of “Geophysics and Volcanology” at University of Napoli Federico II (1990-93)
- Coordinator of the Ph.D. course on “Seismic Risk” at the University of Napoli Federico II (2000-2006)
- Faculty Member of “European School for Advanced Studies in Reduction of Seismic Risk (ROSE)”, Istituto Universitario di Studi Superiori, Pavia (since 2001)
- Faculty Member of the Ph.D. course in “Geophysics” at the University of Bologna (since 2002)
- Scientific Coordinator of “Scuola di Alta Formazione sui Rischi Ambientali” Regione Campania (2003-2007)

Main Scientific Projects

- Director of Progetto Finalizzato di Geodinamica of CNR (1974-1977)
- Coordinator for Europe of the Unit of Crustal Anomalies of NASA MAGSAT Project (1980-83)
- National Coordinator of MURST “LEMI” (Litosfera elettromagnetica in Italia) Project (1993-1997)
- Main Coordinator of the EC FP4 TomoVes (Seismic Tomography of Mt. Vesuvius) Project (1998-2000)
- Main Coordinator of the EC FP5 PEFIRVES Project (2002-2003)
- Main Coordinator of EC FP6 NaRAs (Natural Risk Assessment) Project (2004-2006)
- Steering Committee member of EC FP6 SAFER (Seismic Early Warning for Europe) Project (2006-2008)
- Scientific Responsible of “Centro Regionale di Competenza Analisi e Monitoraggio del Rischio Ambientale (AMRA)”. Regione Campania (2002-2006)
- RELUIS – DPC Seismic Engineering Project. Scientific Coordinator of the research line: “Seismic Monitoring and early warning of strategic structures” (2005-2007).

Italian Committees

- Scientific Committee of Istituto Internazionale di Vulcanologia (CNR) (1971-1974)
- Committee the Construction in seismic areas, Italian Ministry of Public Works (1970-1977);
- Scientific Committee of Istituto Nazionale di Geofisica (1972-1976)

- Consulting Committee for Geological Sciences CUN (Ministry of Public Education) (1982-1985)
- National Oil Committee, Ministry of Industry (1988-1996)
- Commission “Great Risks” of Italian Civil Protection (1994-2000)
- Scientific Committee of the Fondazione IDIS-Città della Scienza, Napoli (1990-2003)
- Evaluation Committee of the Università di Bologna. (2002)
- Regione Campania Commission for Land Use Planning Strategy (2003-2004)

International Committees

- Scientific Committee ATP Geodynamique, CNRS-INAG, France (1975-1977)
- Scientific Committee for the eruptive crisis of Guadeloupe volcano, French Government (1976)
- Interunion Commission of Geodynamics (IUGG-IUGS) (1975-1977)
- Executive Committee of International Union of Geodesy and Geophysics (IUGG) (1991-1995)
- Commission d’expertise of Minister of “Equipment, Transports et Tourisme”, France (1995-1997)
- European Commission Committee for research agreements on environmental risks with the Indian Government (2004)
- Commission of european experts for the preparation of the United Nations Conference of Kyoto on environmental risks (2005)
- Consulting Committee on Environment and Climate Changes of the European Commissioner for Research (since 2006)
- Scientific Committee of Gis Curare, Nice (since 2005)
- Scientific Committee of the Pole Gestione des Risque de la Region PACA, France (since 2006)

International Associations

- Vice President of the International Association of Volcanology and Chemistry of the Earth’s Interior (1987-1991)
- President of the International Association of Volcanology and Chemistry of the Earth’s Interior (1991-1995)

Prizes

- Gold Medal of the President of Italian Republic

Consultant activities for International Agencies

- Organizacion Latino Americana Desarrollo Energetico (OLADE)
- United Nations Department of Energy
- UNESCO
- U.S. Agency for International Development
- World Bank

Consultant activities for companies

- AGIP, Milano
- AQUATER, San Lorenzo in Campo
- CEL, El Salvador
- COGEFAR, Milano
- DEP, Atene
- ELECTROCONSULT, Milano
- ELSEVIER PUBL.CO., Amsterdam
- ENEA, Roma
- ENEL, Roma
- ENTERPRISE OIL, Londra
- GEOMINERARIA, Torino
- GEOSYSTEM, Milano
- GEOTERMICA ITALIANA, Pisa
- ITALSIDER, Napoli
- IHRE, Panama
- NUCLEAR ENTERPRISE, Londra
- RIMIN, Follonica
- SIGECOR, Napoli
- SNAM PROGETTI, Milano
- STRETTO DI MESSINA, Roma
- TEXACO, Houston
- T.P.A.O., Ankara
- UNILEVER, Roma
- UNOCAL, Santa Rosa, California

Editoriale activity

Articles published on

- IL CORRIERE DELLA SERA, Milano
- IL GIORNO, Milano
- IL MATTINO, Napoli
- IL MESSAGGERO, Roma
- IL GIORNALE DI NAPOLI, Napoli
- PAESE SERA, Roma
- IL ROMA, Napoli
- IL SOLE 24 ORE, Roma

- O GLOBO, Sao Paulo
- TIMES, New York
- LE SCIENZE, Milano
- SCIENZA 2000, Roma
- SCIENCE 86, Washington
- LE SCIENZE E IL LORO INSEGNAMENTO, Firenze
- TEKNOS, Milano.

Scientific publications:

a) MAIN PAPERS SINCE 1995

- BERRINO G., GASPARINI P., 1995. **Ground deformation and caldera unrest.** Cahiers du Centre Europ.Geodyn.Seismol., 8: 41-55
- GASPARINI P., JOHNSON R.W., 1995. **History of IAVCEI.** IUGG Chronicles, 226:68-72.
- GASPARINI P., 1996. **Vulcanologia.** V Appendice Enciclopedia Italiana, 788-791.
- GASPARINI P., 1996. **Vulcanologia.** Enciclopedia delle Scienze Fisiche, Vol. VI, 580 - 586.
- GASPARINI P., PIERATTINI D., 1996. Macedonio Melloni e l' Osservatorio Vesuviano. **Le Scienze**,333: 88-95.
- De MARTINO S., SABBARESE C., GASPARINI P., 1996. **Radon migration in the soils of the Irno Valley (Southern Italy) inferred from radioactive disequilibrium.** Annali Geofisica, 38: 439-450
- ZOLLO A., GASPARINI P., BIELLA G., DE FRANCO R., BUONOCORE B., MIRABILE L., DE NATALE G., MILANO G., PINGUE F., VILARDO G., BRUNO P.P., DE MATTEIS R., LE MEUR H., IANNACCONE G., DESCHAMPS A., VIRIEUX J., NARDI A., FREPOLI A., HUNSTAD I., GUERRA I., 1996. **2D seismic tomography of Somma - Vesuvius: Description of the experiment and preliminary results.** Annali Geofisica, 39: 471-486.
- SCARPA R., GASPARINI P. 1996. **A review of volcano geophysics and volcano monitoring methods.** In "Monitoring and mitigation of volcano hazards" Eds. R.Scarpa and R.I.Tilling, Springer, p.3-22.
- ZOLLO A., GASPARINI P., VIRIEUX J., LE MEUR H., DE NATALE G., BIELLA G., BOSCHI E., CAPUANO P., DE FRANCO R., DELL' AVERSANA P., DE MATTEIS R., GUERRA I., IANNACCONE G., MIRABILE L., VILARDO G., 1996. **Seismic evidence for a Low-velocity Zone in the Upper Crust beneath Mount Vesuvius.** Science, 274: 592-594 (Cit. 51)
- GASPARINI P., PIERATTINI D.,1997. **Magnetic measurements at Napoli in the XIX Century.** Annali Geofisica, **40:563-568**
- CAPUANO P., FLORIO G., GASPARINI P., 1997. **Structural model of the Northern Latium volcanic area constrained by MT, gravity and aeromagnetic data.** Annali Geofisica, 40: 1069-1082.
- CAPUANO P., DE LUCA G., DE SENA F., GASPARINI P., SCARPA R., 1998. **The density of the rock covering Gran Sasso National Laboratories from underground gravity measurements.** J.Appl.Geophys., 39: 25-33.
- ZOLLO A., GASPARINI P., VIRIEUX J., BIELLA G., BOSCHI E., CAPUANO P., DE FRANCO R., DELL' AVERSANA P., DE MATTEIS R., DE NATALE G., GUERRA I., IANNACCONE G., LE MEUR H., MIRABILE L., VILARDO G., 1998 **2D image of Mt. Vesuvius from seismic tomography.** J. Volcanol. Geotherm. Res., 82:161-173 (Cit. 23)
- GASPARINI P. and the TomoVes Working Group, 1998. **Looking inside Mt. Vesuvius.** EOS, 79: 229-232 (Cit. 25)

GASPARINI P.,1999. **Looking inside Mt. Vesuvius.** Earth in Space, American Geophysical Union, 5:10-14

GASPARINI P., PIERATTINI D., 1999. **La fisica terrestre nell'Università di Napoli.** Archivio di Storia della Cultura, 12: 69-91.

AUGER E., GASPARINI P., VIRIEUX J., ZOLLO A., 2001. **Seismic evidence of an extended magmatic sill under Mt. Vesuvius.** Science, 294, 1510-1512. (Cit. 21)

DE LORENZO S., GASPARINI P., MONGELLI F., ZOLLO A., 2001. **Thermal state of the Campi Flegrei caldera inferred from seismic attenuation tomography.** J.Geodynamics, 32: 467-486. (Cit. 4)

ZOLLO A., D'AURIA L., DE MATTEIS R., HERRERO A., VIRIEUX J., GASPARINI P., 2002. **Bayesian estimation of 2-D velocità models from active seismic arrival time data: imaging of the shallow structure of Mt. Vesuvius (Southern Italy)** Geophys. J.Int., 151: 566-582 (Cit. 9)

CIVETTA L., D'ANTONIO M., DE LORENZO S., GASPARINI P., 2003. **Isotopic and Thermal Implications of a mid-crustal magmatic sill under Mt. Vesuvius. In: The Internal Structure of Mt. Vesuvius.** Capuano P. et al. (Eds) European Commission Research DG, Liguori, Napoli, pp.424-436.

CIVETTA L. , D'ANTONIO M. , DE LORENZO S., DI RENZO V., GASPARINI P., 2004. **Thermal and geochemical constraints on the 'deep' magmatic structure of Mt. Vesuvius.** J.Volcanol.Getherm.Res. 33:1-12 (Cit. 4)

MARZOCCHI W., SANDRI L., GASPARINI P., NEWHALL C., BOSCHI E., 2004. **Quantifying probabilities of volcanic events: The example of volcanic hazard at Mount Vesuvius.** J.Geophys.Res., 109, B11201,doi:10.1029/2004JB003155

GASPARINI P., 2005. **La formazione degli elementi e la nascita della Terra.** In: Enciclopedia della Scienza, La Terra, Federico Motta Editore, Milano, Vol.II pp.42-101.

DE LORENZO S., DI RENZO V., CIVETTA L., D'ANTONIO M., GASPARINI P., 2006. **Thermal model of the Vesuvius magma chamber.** Geophys.Res.Letters, 13: L17302, doi: 10.1029/2006GL026587.

b) BOOKS

- 1.ADAMS J.A.S., GASPARINI P., 1970. **Gamma-ray spectrometry of rocks.** Elsevier Publ.Co., Amsterdam, 295 pp.24. (Cit. 46)
- 2.CIVETTA L., GASPARINI P., LUONGO G., RAPOLLA A. (Eds), 1974. **Physical Volcanology.** Elsevier Publ.Co., Amsterdam, 333 pp. (Cit. 7)
- 3.GASPARINI P. (Ed.), 1977 **Problemi di Geofisica: dallo spazio al nucleo terrestre.** Le Scienze, 247 pp.
- 4.GASPARINI P., MANTOVANI M.S.M.,1981. **Fisica della Terra Solida** Liguori Editore, Napoli, 508 pp.
- 5.GASPARINI P. (Ed) 1983 **I vulcani.** Quaderno N.4 di "Le Scienze", 96 pp.
- 6.GASPARINI P. (Ed.), 1987. **L' attivita' vulcanica.** Quaderni de Le Scienze N.39,96 pp.
- 7.GASPARINI P., MUSELLA S., 1991. **Un viaggio al Vesuvio.** Liguori Editore, Napoli. 307 pp. (Cit.11)

8. GASPARINI P., SCARPA R., AKI K. (Eds) 1992. **Volcanic Seismology**. Springer Verlag, Heidelberg. 572 pp (Cit. 8)
9. MOZZILLO A., VALLET J., GASPARINI P., GIGANTE M., PLACANICA G., FRATTA A., DURANTE F. SPINOSA N., 1994. **Il Vesuvio**. Franco Di Mauro Editore, Napoli.
10. GASPARINI P., 1994. **Il "Viaggio all' Etna" di Lazzaro Spallanzani**. CUEN, Napoli.
11. HILL D.P., GASPARINI P., Mc NUTT S., RYMER H.(Eds), 1994. **Internal Structure of volcanoes and geophysical precursors of eruptions**. J.Volcanol.Geotherm.Res., 61,3- 4.
12. ALISIO G.C., GIGANTE M., GASPARINI P., DE CARO S., APOLITO P., DE MATTEIS S., DE SETA C., STARACE F., DI LIELLO S., GIALANELLA C., KNIGHT C., PINTO V., MOZZILLO A., 1995. **I Campi Flegrei**. Franco Di Mauro Editore, Napoli.
13. GASPARINI P., MELONI A., PATELLA D.(Eds), 1997. **Magnetic, electric and electromagnetic methods in seismology and volcanology**. Annali Geofisica, 40.
14. GASPARINI P., 1998. **Geophysical monitoring of the italian active volcanoes: 1993-95**. Acta Vulcanologica
15. DE NATALE G., GASPARINI P., COPPA U. (Eds.), 1999. **Physics of volcanic phenomena and eruption precursors**. Annali Geofisica, 42,3.
16. GASPARINI P., 2000. **La Terra inquieta**. Franco Di Mauro Editore, Napoli, 170 pp.
17. ZOLLO A., BOBBIO A., GASPARINI P., CASALE R., YEROYANNI M., 2003. The TOMOVES seismic project: Looking inside Mt. Vesuvius. e-book European Commission Directorate General XII, CUEN, Napoli.
18. CAPUANO P., GASPARINI P., ZOLLO A., VIRIEUX J., CASALE R., YEROYANNI M., 2003. The Internal Structure of Mt. Vesuvius. European Commission Research DG, Liguori, Napoli, 595 pp. (Cit.4)