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Curriculum Vitae del Prof. Paolo Favali

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Indirizzo professionale: Istituto Nazionale di Geofisica e Vulcanologia (INGV), Via di Vigna Murata 605 - 00143 Roma (Italia).

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Laureato *cum laude* nel 1976 in Scienze geologiche nell'Università "La Sapienza" di Roma con specializzazione in geofisica. Ricercatore dal 1979, attualmente è Dirigente di Ricerca dal 2000. Ha circa 35 anni di esperienza con campi principali di interesse in Rischi naturali (principalmente Sismico), Sismotettonica, Geodinamica, Geofisica Applicata e Scienze Ambientali. Coopera in progetti di ricerca e tecnologici con molte università italiane e internazionali, con Istituzioni scientifiche e Industrie. In questi progetti sono stati sviluppati, realizzati e validati sistemi complessi sottomarini e prototipi di sensori per utilizzi per acque basse e profonde.

Membro del Consiglio d'Amministrazione dell'Istituto Nazionale di Geofisica dal 1987 al 2000.

Ha insegnato "Fisica della Terra Solida" e "Fisica Terrestre" presso università italiane fin dal 1994; Università della Basilicata (1994-1997), Università di Chieti (1998-2004) e Università "La Sapienza" di Roma (2005-2009). *Tutor* di molti studenti durante le loro tesi di laurea e di dottorato.

Convener fin dal 1996 in Conferenze Scientifiche Internazionali. Nel 1999 è stato Editor del volume edito da Elsevier intitolato "Science-Technology Synergy for research in marine environment: Challenges for the XXI Century" (Developments in Marine Technology, vol. 12). Nel 2004 è stato Editor del numero 46/8 di Environmental Geology edito da Springer. Nel 2006 è stato Editor del volume degli Annals of Geophysics "Special issue dedicated to Giuseppe Smriglio. From land networks to seafloor observatories" (vol. 49/2-3). Nel 2015 è Editor del volume stampato da parte di Springer-Praxis Books, Geophysical Series "Seafloor Observatories: A New Vision of the Earth from the Abyss", cui ha contribuito con numerosi capitoli (vedi lista pubblicazioni riportata sotto).

Membro (1999-2003) per l'European Science Foundation del Detailed Programme Group SEIZE (Seismogenic Zone Experiment) dell'Ocean Drilling Programme.

Dal 2005 è membro dello Steering Committee dell'iniziativa europea "The Deep-Sea Frontier".

Coordinatore dei seguenti progetti per lo sviluppo e l'uso scientifico di osservatori e reti multidisciplinari sottomarine e infrastrutture correlate:

GEOSTAR 3° Programma CE-MAST (1995-1998);
GEOSTAR 2 3° Programma CE-MAST (1999-2001);

TYDE	Accesso alle Infrastrutture di ricerca della CE (2000-2003);
ORION-GEOSTAR-3	5° Programma Quadro della CE (2002-2005);
EMSO-PP	FP7 Infrastrutture di Ricerca della Roadmap ESFRI (2008-2012);
MABEL	Programma Nazionale Ricerche in Antartide(PNRA) (2000-2009);
PEGASO	Regione Siciliana (Structural funds) (2005-2008);
EMSO-MIUR	MIUR Fondi FOE (2010-2015);
EMSO-MedIT	MIUR (Structural funds) (2013-2016)
EMSODEV	H2020 Infrastructure Implementation project (2015-2018).

Coordinatore dell'Infrastruttura di Ricerca Europea EMSO (European Multidisciplinary Seafloor and Water-Column Observatory, <http://emso-eu.org>), inclusa nella prima Roadmap ESFRI (2006), nel PNR italiano (fin dal 2011-2013) e nella Roadmap italiana per le Infrastrutture di Ricerca. Ora considerata un'infrastruttura di successo, per cui uscirà dalla Roadmap ESFRI e sarà inclusa nel capitolo appunto delle "success stories". A tal fine la CE sta finanziando un progetto di implementazione a sostegno dell'infrastruttura denominato EMSODEV (2015-2018).

Fin dal 2000 è Esperto Valutatore di progetti a partire dal 5° Programma Quadro della Commissione Europea.

Rappresentante dell'INGV fin dal 1995 nell'International Ocean Network (ION), che ha lo scopo di promuovere attività per lo sviluppo di reti di monitoraggio marine, un'entità inter-associazione dell'International Union of Geodesy and Geophysics (IUGG). Dal 2014 è membro dell'International Scientific Advisory Board (ISAB) di Ocean Networks Canada (ONC).

In 2015 ha ricevuto l'"Executive Certificate in Strategy and Innovation" da parte del Massachusetts Institute of Technology (MIT), Sloan School of Management.

Responsabile dal 2001 al 2014 dell'Unità Marina dell'INGV RIDGE (Ricerche InterDisciplinari GEomarine). Attualmente coordina un gruppo di ricerca dell'INGV composto da 55 persone di cui 7 associati di ricerca che è stato ed è coinvolto in molti progetti nazionali e internazionali (ad es., EC-ASSEM, GNDT-SN-1, EC-ESONET-CA, FIRB-APLABES, DPC-V2, DPC-V5, DPC-S2, EC-MOMARNET, EC-KM3NET DS, EC-NEAREST, EC-NERIES, EC-TRANSFER, EC-ESONET-NoE, EC-HYPOX, EC-DS3F, EC GENESI-DEC, FIRB-SMO, MISE-LIGEMA, MIUR-RITMARE, EC-SCIDIP-ES, EC-COOPEUS, EC-ENVRI, POR-MONSOON, FESR-MOSSAG, EC-MARSITE, EC-MEDSUV, EC-FIXO3, EC-INDIGO, EC-ENVRIPLUS).

Ha pubblicato circa 150 pubblicazioni in riviste internazionali e italiane, e Atti (vedere la lista allegata delle sole pubblicazioni su riviste internazionali a partire dal 1998).

Prof. Paolo Favali

Pubblicazioni in Riviste Internazionali (dal 1998)

- 1) L. Beranzoli, A. De Santis, G. Etiope, P. Favali, F. Frugoni, G. Smriglio, F. Gasparoni, A. Marigo, 1998. GEOSTAR: A GEophysical and Oceanographic STation for Abyssal Research.. *Phys. Earth Planet. Int.*, 108:175-183, doi:10.1016/S0031-9201(98)00094-6.
- 2) P. Favali, G. Smriglio, L. Beranzoli, T. Braun, M. Calcaro, G. Etiope, F. Frugoni, C. Millot, J.-L. Fuda, M.P. Marani, F. Gamberi, J.V. Dobson, N. Marshall, 1998. GEOSTAR-scientific goals of the project and results of the first test phase, *IEEE-OCEANS '98 Conference Proceedings*, vol. 2, 1088-1090, doi: 10.1109/OCEANS.1998.724404.
- 3) G. Etiope, P. Beneduce, M. Calcaro, P. Favali, F. Frugoni, M. Schiattarella, G. Smriglio, 1999. Structural pattern and CO₂-CH₄ degassing of the Ustica Island, Southern Tyrrhenian Basin, *J. Volc. Geoth. Res.*, 88:291-304.
- 4) H.W. Gerber, P. Favali, G. Smriglio, F. Gasparoni, J. Marvaldi, J.-M. Coudeville, 1999. GEOSTAR benthic observatory: Technological results, *J. Acoust. Soc. Am.*, 105/2:1169, ISSN: 0001-4966, doi: <http://dx.doi.org/10.1121/1.425545>.
- 5) M. Agate, L. Beranzoli, T. Braun, R. Catalano, P. Favali, F. Frugoni, F. Pepe, G. Smriglio, A. Sulli, 2000. The 1998 offshore NW Sicily earthquakes in the tectonic framework of the southern border of the Tyrrhenian Sea, *Mem. Soc. Geol. It.*, 55:103-114.
- 6) L. Beranzoli, T. Braun, M. Calcaro, D. Calore, R. Campaci, J.-M. Coudeville, A. De Santis, G. Etiope, P. Favali, F. Frugoni, J.-L. Fuda, F. Gamberi, F. Gasparoni, H.W. Gerber, M.P. Marani, J. Marvaldi, C. Millot, C. Montuori, P. Palangio, G. Romeo, G. Smriglio, 2000. European Seafloor Observatory offers new possibilities for deep-sea study, *EOS, Trans. AGU*, 81,5:45-49.
- 7) L. Beranzoli, T. Braun, M. Calcaro, A. De Santis, D. Di Mauro, G. Etiope, P. Favali, F. Frugoni, C. Montuori, P. Palangio, G. Romeo, G. Smriglio, F. Gamberi, M.P. Marani, J.-L. Fuda, C. Millot, 2000. GEOSTAR, an observatory for deep-sea geophysical and oceanographic researches: characteristics, first scientific mission and future activity, *Mem. Soc. Geol. It.*, 55:491-497.
- 8) R. Console, R. Di Giovambattista, A. Di Sanza, P. Favali, G. Smriglio, 2000. The role of constraints on joint hypocentre determination in seismotectonic studies. *Geophys. J. Int.*, 143:129-141.
- 9) G. Etiope, F. Italiano, J.-L. Fuda, P. Favali, F. Frugoni, M. Calcaro, G. Smriglio., F. Gamberi, M.P. Marani, 2000. Deep Submarine Gas Vents in the Aeolian Offshore, *Physics and Chemistry of the Earth*, 25:25-28.
- 10) A. Argnani, F. Frugoni, R. Cosi, M. Ligi, P. Favali, 2001. Tectonics and Seismicity of the Apulian Ridge south of Salento Peninsula (Southern Italy), *Annali di Geofisica*, 44:527-540.
- 11) M. Calcaro, L. Beranzoli, T. Braun, D. Calore, A. De Santis, G. Etiope, P. Favali, F. Frugoni, F. Gasparoni, C. Montuori, G. Smriglio, 2001. MABEL: a Multidisciplinary Benthic Laboratory for Deep-sea, Long-term monitoring in the Antarctica, *Terra Antartica*, 8:115-118.
- 12) F. Italiano, R. Favara, G. Etiope, P. Favali, 2001. Submarine emissions of greenhouse gases from hydrothermal and sedimentary areas. In: Cidu (ed.) *Water-Rock interaction*, Swets, Zeitlinger: 863-866.
- 13) L. Beranzoli, P. Favali, G. Smriglio (ed.), 2002. Science-Technology Synergy for Research in the Marine Environment: Challenges for the XXI Century, *Developments in Marine Technology*, 12, pp.268, Elsevier, Amsterdam.
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- 33) I.G. Priede, R. Person, P. Favali, 2004. European Seafloor Observatory Network, *Sea Technology*, 46, 10:45-49, ISSN:0093-3651.
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- 40) G. Etiope, P. Favali, J.-L. Fuda, F. Italiano, M. Laubenstein, C. Millot, W. Plastino, 2006. The Benthic Boundary Layer: geochemical and oceanographic data from the GEOSTAR-2 observatory, *Ann. Geophys.*, 49, 2/3:705-714.
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Member (1999-2003) for the European Science Foundation of the Detailed Programme Group SEIZE (Seismogenic Zone Experiment) of Ocean Drilling Programme.

He is Member since 2005 of the Steering Committee of the European initiative "The Deep-Sea Frontier".

Co-ordinator of the following projects for the development and scientific use of multidisciplinary seafloor observatories and networks, and related infrastructures:

GEOSTAR	3 rd EC-MAST Programme (1995-1998);
GEOSTAR 2	3 rd EC-MAST Programme (1999-2001);
TYDE	Access to EC Research Infrastructures (2000-2003);
ORION-GEOSTAR-3	5th EC framework Programme (2002-2005);
EMSO-PP	FP7 Research infrastructures of ESFRI Roadmap (2008-2012);
MABEL	National Programme for Antarctic Researches (PNRA) (2000-2009);
PEGASO	Regione Siciliana (2005-2008);
EMSO-MIUR	MIUR FOE funds (2010-2015);
EMSO-MedIT	MIUR (Structural Funds) (2013-2016).
EMSODEV	H2020 Infrastructure Implementation project (2015-2018)

Co-ordinator at of the European Research Infrastructure EMSO (European Multidisciplinary Seafloor and Water-Column Observatory, <http://www.emso-eu.org>), included in the first ESFRI Roadmap (2006), in the National Research Programme (form 2011-2013) and Italian Roadmap for Research Infrastructures. EMSO is now considered a successful infrastructure, for this reason it will get out form the ESFRI Roadmap and it will be included in the chapter of the “success stories”. In this respect EC awarded an implementation project to support the EMSO infrastructure, namely EMSODEV (2015-2018).

Since 2000 and starting from the 5th Framework Programme of the European Commission, he acts as Expert Evaluator of projects.

Representative of INGV since 1995 inside the International Ocean Network (ION), which is aimed at promoting activities for the development of the marine monitoring networks an inter-association entity of the International Union of Geodesy and Geophysics (IUGG). Since 2014 he is member of the International Scientific Advisory Board (ISAB) of the Ocean Networks Canada (ONC).

In 2015 he was awarded of the “Executive Certificate in Strategy and Innovation” by Massachusetts Institute of Technology (MIT), Sloan School of Management.

Head from 2001 to 2014 of the Marine Unit of INGV, RIDGE Unit (GEomarine InterDisciplinary Researches). Presently he coordinates an INGV research group composed by 55 people, including 7 Research Associates, which was and is involved in many national and international projects (e.g., EC-ASSEM, GNDT-SN-1, EC-ESONET-CA, FIRB-APLABES, DPC-V2, DPC-V5, DPC-S2, EC-MOMARNET, EC-KM3NET DS, EC-NEAREST, EC-NERIES, EC-TRANSFER, EC-ESONET-NoE, EC-HYPOX, EC-DS3F, EC GENESI-DEC, FIRB-SMO, MISE-LIGEMA, MIUR-RITMARE, EC-SCIDIP-ES, EC-COOPEUS, EC-ENVRI, POR-MONSOON, FESR-MOSSAG, EC-MARSITE, EC-MEDSUV, EC-FIXO3, EC-INDIGO, EC-ENVRIPLUS).

He published about 150 papers on International and Italian Journals, and Proceedings (see selected list of publications on International Journals from 1998).

Prof. Paolo Favali

Selected publications in International Journals (from 1998)

- 1) L. Beranzoli, A. De Santis, G. Etiope, P. Favali, F. Frugoni, G. Smriglio, F. Gasparoni, A. Marigo, 1998. GEOSTAR: A GEophysical and Oceanographic STation for Abyssal Research.. *Phys. Earth Planet. Int.*, 108:175-183, doi:10.1016/S0031-9201(98)00094-6.
- 2) P. Favali, G. Smriglio, L. Beranzoli, T. Braun, M. Calcaro, G. Etiope, F. Frugoni, C. Millot, J.-L. Fuda, M.P. Marani, F. Gamberi, J.V. Dobson, N. Marshall, 1998. GEOSTAR-scientific goals of the project and results of the first test phase, *IEEE-OCEANS '98 Conference Proceedings*, vol. 2, 1088-1090, doi: 10.1109/OCEANS.1998.724404.
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- 9) G. Etiope, F. Italiano, J.-L. Fuda, P. Favali, F. Frugoni, M. Calcaro, G. Smriglio., F. Gamberi, M.P. Marani, 2000. Deep Submarine Gas Vents in the Aeolian Offshore, *Physics and Chemistry of the Earth*, 25:25-28.
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