

## Curriculum vitae

# Paolo Diviaco

(Ph.D., Dott., Geol.)

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### Personal information

**Born** Trieste (Italy)  
25/7/1967

**Gender** Male

**Nationality** Italian

**Affiliation** Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

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### Studies

#### --Ph.D.--

**"Geophysics of the Lithosphere and Geodynamics"** at the Department of Earth Sciences of the University of Trieste discussing the thesis **"Advanced seismic processing of CROP dataset in the area of the Tuscan Archipelago, Northern Thyrrhenian sea and Sardo-Corsican block"**

#### --State Licenced Geologist --

#### --University Degree--

Geology, with theses in Geophysics, got on 11/3/1993 with **110/110 cum laude** at the University of Trieste discussing:

1. **"Seismic Inversion of the evolution of a basin, quantitative validation of models based on reflection seismic prospecting"** .
2. **"Implementation of GRM method for the interpretation of refraction seismic data"**.

Both on the application of computer methods in geophysics

#### --High school--

Second level College of Science

### Personal Skills

#### Languages

Mother tongue	Italian				
Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
<b>English</b>	Proficient (C2)	Proficient (C2)	Proficient (C2)	Proficient (C2)	Proficient (C2)
<b>French</b>	Independent (B2)	Independent (B2)	Independent (B2)	Independent (B2)	Basic (A2)

### Communication skills

I have good communication skills that I developed collaborating with several partners within several research and commercial projects. Besides, I had the occasion to teach in a considerable number of training courses which, I think, helped me in refining my skills to be clear and effective.

### Organizational/managerial skills

Since 2007 I manage a research group of approximately ten people within my organization, and have been involved in the coordination of several working group in multinational contexts.

### Computer skills

I have been IT system admin from many companies and work groups since 1993

Systems: Unix, Linux, Win, Apple

Programming: C/C++, Visual-Basic, SQL, PHP, XML

## Work experiences

Since 1/7/98, at **Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS)** working on:

- **Web based collaborative data systems**
- **Seismic data processing and velocity modelling**
- **Software development**
- **System management**

Since 2007 Coordinator of the OGS DIAM-PROS unit, which mission is to follow all the steps of geophysical data after acquisition: from processing to archive to its valorisation inside and outside OGS.

The DIAM-PROS unit process data both for research and industrial purposes within several National and International projects, and has a staff of 10 collaborators from technicians to scientists.

From September 2011 to December 2012 Vice-director of the RIMA (marine research and technologies) department. Later the department structure of OGS changed.

Coordinator for many commercial project in seismic data processing for private companies (e.g. Fugro, OCSA, Statoil) both land and off-shore.

Reviewer for BGTA, DSS, EAGE, EGU, DRANS, KESW, IGI

### :: Involvement in European Union funded projects::

- Principal investigator for OGS-IRI within the EU FP7 Project **ODIP**, aiming at developing interoperability prototypes among several data sharing initiatives in Europe, the United States and Australia
- Principal investigator for OGS-IRI within the EU **EMODnet Bathymetry** project processing and definition of a bathymetric DTM in the Mediterranean area within the European Marine Observation and Data Network (EMODnet) second edition
- OGS-IRI coordinator for software development, and Large scale seismic hardware development within EU FP7 Project **EUROFLEETS2**, that aims at building an European scale research fleet. WP leader for remote ship access, event log software governance and

development.

- Principal investigator for OGS within the EU FP7 Project **GeoSeas**, which aims at building an European wide data sharing initiative in the field of Geophysics and Geology (27 european partners such as for example IFREMER, BGS, BGR..). WP leader for standardization, development of web based software tools, collaborative software.

<http://www.geo-seas.eu/>

- OGS coordinator for software development within EU FP7 Project **EUROFLEETS**, that aims at building an European scale research fleet. WP leader for development of an event logger tool that will be used within the infrastructure.

<http://www.eurofleets.eu/np4/home.html>

- Principal investigator for OGS-RIMA subcontract within the **EMODnet Hydrography** project : processing and definition of a bathimetric DTM in the Mediterranean area within the European Marine Observation and Data Network (EMODnet)
- Partner of the EU MAST III **VHR3D** (Very High Resolution 3D) project aimed at developing a complete acquisition and processing system for VHR 3D marine seismic data. In particular development of **COSA**: an innovative method for automatic correction of static and dynamic problems due to swell, tides, marine currents and positioning errors.
- Principal investigator for the development of **MetaSNAP**: Seismic Data Discovery Portal: a meta-engine/aggregator of SNAP web based data portals developed within the EU FP6 project **CO2Geonet**.
- Principal investigator for the project **RADA** (Reprocessing Avanzato di Dati sismici Antartici) funded by PNRA (Italian National Antarctic Research Project). The project was aimed at reprocessing (wavelet processing, depth modelling) vintage data in the area of the Magallanes-Fagnano Fault System and in the Pacific Margin of Antarctic Peninsula.
- Principal investigator for the development of **SNAP**: a web based content manager built over SVG technology to discover and access seismic data. Seismic data itself can be accessed and viewed interactively (with basic processing) form the web. SNAP is used within several international initiatives as:
  - **Seismic Data Library System (SDLS)**:  
International initiative funded by the Scientific Committee on Antarctic Research (SCAR) aimed at the dissemination of marine seismic data collected by multiple institutions in the Antarctic region.  
<http://sdls.ogs.trieste.it>
  - **European Consortium for Ocean Research Drilling (ECORD)**:  
International initiative aimed at the dissemination of seismic data collected by multiple institutions in Europe.
  - **OGS Open Archive**:  
Web based databank for Mediterranean, Black sea and Antarctic seismic data collected by OGS.
  - **Internal OGS/GDL databank**  
Internal OGS archiving facility for recent datasets (seismic, sidescan sonar, multibeam).

#### :: Other working experiences::

- Principal investigator for the development of COLLA: a Computer Supported Collaborative

Work (CSCW) toolkit focusing on seismic data scientific research. COLLA is used within several internal (OGS) and external projects as GeoSeas and Eurofleets

- Principal investigator in the development of an internal OGS web based archiving facility for documents and internal reports.
- Partner for the Italian project MICA: acquisition and processing of HR land data for hydrogeology in Northern Italy
- Partner for the Extended Field Tests for the geophysical survey in the area of the nuclear power station of Krško (Slovenia).
- Principal investigator in the development of the CD/DVD version of the Seismic Data Library System (SDLS) an initiative of the Scientific Committee on Antarctic Research (SCAR).
- Developer of a conversion software for Datasonic Chirp II mod CAP-6600
- Debug of several problems of a “vintage” version of the seismic data processing software Halliburton Galaxi still used within several internal processing flows.
- Developer of an internal web based manuals and references portal
- Teacher at Kionos, Trieste (10 courses in basic informatics, office automation and web related issues)
- Teacher at ArsFUTURA, Trieste (25 courses in basic informatics, office automation and web related issues)
- Teacher at Istituto Triveneto della Formazione, Padova (2 courses in basic informatics, office automation and web related issues)
- Teacher at ENAIP - FVG, Trieste (15 courses in office basic informatics, automation, web related issues and physics)
- at Exploration Geophysics Group (EGG) of the University of Trieste, as:
  - seismic processor (with Promax on Crop dataset)
  - system manager (net of Sun workstations and PC)
  - webmaster
- Freelance programmer for SQS, Trieste developing software in accident statistics (Visual Basic/SQL):
- from 3/95 to 6/98 Ph.D. student, doing also:
  - maintenance of the E.G.G. processing centre
  - develop of specific seismic processing programmes
  - webmaster
- from 12/94 to 3/95 at the Departement of Biology of the University of Trieste to develop a system to monitor fishery in the Adriatic sea
- from 1/94 to 8/94 at JuliaComputer, via S.Giusto 9, Trieste as computer technical assistant and seller (Apple, Sun, Silicon Graphics, Digital, AST)
- from 3/93 to 6/93 at the former Institute of Geophysics and Geodesy as seismic data analyst
- since '89 Private lessons in Mathematics and Physics

## Publications

### Books

- Lead Editor for IGI book **Diviaco, P.**, Leadbetter, A., Glaves, H., Oceanographic and Marine Cross-Domain Data Management for Sustainable Development, IGI-Global DOI: 10.4018/978-1-5225-0700-0 (in print)
- **Diviaco, P.**, Leadbetter, A., Balancing Formalization and Representation in Cross-Domain Data Management for Sustainable Development, IGI-Global DOI: 10.4018/978-1-

5225-0700-0.ch002 in **Diviaco, P.**, Leadbetter, A., Glaves, H., Oceanographic and Marine Cross-Domain Data Management for Sustainable Development, DOI: 10.4018/978-1-5225-0700-0 (in print)

- **Diviaco, P.**, Sorribas, J., DeCawer, K., Siquin, J.M., Casas, R., Busato, A., Stoyanov, Y., Scory, S., Repositioning Data Management Near Data Acquisition, IGI-Global DOI: 10.4018/978-1-5225-0700-0.ch008 in **Diviaco, P.**, Leadbetter, A., Glaves, H., Oceanographic and Marine Cross-Domain Data Management for Sustainable Development, DOI: 10.4018/978-1-5225-0700-0 (in print)
- Diviaco, P. E-Research: a way of learning together? In Cultural, behavioural, and Social Considerations in Electronic Collaboration, Kok, A. Hyunkyung L.. IGI-Global, ( 2016) DOI: 10.4018/978-1-4666-9556-6.ch011
- Lead Editor for IGI book **P. Diviaco**, P. Fox, C. Pshenichny, & A. Leadbetter (Eds.), Collaborative Knowledge in Scientific Research Networks. Hershey, PA: IGI Global.
- **Diviaco, P.**, & Busato, A. (2015). Maps, graphs and annotations as Boundary Objects in Knowledge Networks, Distributed Cognition and Collaborative e-Research. In P. Diviaco, P. Fox, C. Pshenichny, & A. Leadbetter (Eds.), Collaborative Knowledge in Scientific Research Networks. Hershey, PA: IGI Global.
- **Diviaco, P.** (2015). Reconciling Knowledge and Collaborative e-Research. In Collaborative Knowledge in Scientific Research Networks. Hershey, PA: IGI Global.
- **Diviaco, P.** "Addressing Conflicting Cognitive Models in Collaborative E-Research: A Case Study in Exploration Geophysics" in Collaborative and Distributed E-Research: Innovations in Technologies, Strategies and Applications, IGI Global press, DOI: 10.4018/978-1-4666-0125-3.ch012

#### **Papers in International Journals----**

- **Diviaco P.**, Wardell N., Forlin E.,Sauli, C., Burca, M., Busato, A. Centonze, J., Pelos, C." Data rescue to extend the value of vintage seismic data: The OGS-SNAP experience", GeoResJ, Elsevier, in print
- **Diviaco P.** Casas Munos, R., Sorribas, J. Loubrieu, T. "A metadata model for cross-domain marine data management, the SeaDataNet/Geo-Seas experience", BGTA, vol 57, pp59-69,2016, DOI 10.4430/bgta0163.
- **Diviaco P.**, De Cauwer, K., Leadbetter A., Sorribas J., Stojanov Y., Busato A. Cova A. "Bridging semantically different paradigms in the field of marine 5acquisition event logging" Earth Sci Inform DOI 10.1007/s12145-014-0192-0 in print
- **Diviaco P.**, Pshenichny C, Carniel R., Khrabrykh Z., Shterkun V. Mouromtsev D. Guzman S., Pascolo P. "Organization of a geophysical information space by using an event-based collaborative tool" Earth Sci Inform, 2014, DOI 10.1007/s12145-014-0182-2
- **Diviaco P.**, Busato A., "The Geo-Seas Seismic data viewer: a Tool to facilitate the control of data access" Bollettino di Geofisica Teorica ed Applicata vol.54/2 june 2013
- Sorribas J, **Diviaco P**, Bermudez L. Olive J. "Representing Oceanographic Vessels by means of Sensor Web Enablement standards" ACM-SWE 2012. SigSpatial ACM ISBN 978-1-4503-1701-6/12/11

- Pshenichny C. Carniel R. and Diviaco P, "Engineering of Dynamic Knowledge in Exact Sciences: First Results of Application of the Event Bush Method in Physics", in Proceedings of Engineering of Dynamic Knowledge in Exact Sciences: First Results of Application of the Event Bush Method in Physics
- **Diviaco P.**, Lowry R., Schaap D., "Marine seismic metadata for an integrated European scale data infrastructure: the FP7 Geo-Seas project" Bollettino di Geofisica Teorica ed Applicata 01/2013
- **Diviaco, P.** "Addressing Conflicting Cognitive Models in Collaborative E-Research: A Case Study in Exploration Geophysics" in Collaborative and Distributed E-Research: Innovations in Technologies, Strategies and Applications, IGI Global press, DOI: 10.4018/978-1-4666-0125-3.ch012
- Volpi V., Rebesco M., **Diviaco P.**, "New insights in the evolution of Antarctic glaciation from depth conversion of well-log calibrated seismic section of Prydz Bay" International Journal of Earth Sciences 04/2012; 98(8):1991-200
- Loreto M.F, Zgur F, Facchin L, Fracassi U, Pettenati F, Tomini I, Burca M, **Diviaco P**, Sauli C, Cossarini G, De Vittor C, Sandron D, the Explora technicians team "In search of New Imaging for Historical Earthquakes: A New Geophysical Survey Offshore Western Calabria Bollettino di Geofisica Teorica ed Applicata 01/2012; 53
- **Diviaco P** "Towards a collaborative research data-space in Geophysics" Mediterranean Marine Science 01/2011
- Rebesco M, Yanguang L., Camerlenghi A., Winsborrow A., Laberg J., Caburlotto A., **Diviaco P.**, Accettella D., Sauli C., Wardell N., Tomin I. "Deglaciation of the western margin of the Barents Sea Ice Sheet — A swath bathymetric and sub-bottom seismic study from the Kveithola Trough" Marine Geology. 279:141-147.
- **Diviaco P.**, Rebesco M., Camerlenghi A. "Late Pliocene mega debris flow deposit and related fluid escapes identified on the Antarctic continental margin by seismic reflection data analysis", Marine Geophysical Researches, Volume 27, 2006
- **Diviaco P.** "An open source, web based, simple solution for seismic data dissemination and collaborative research", Computers and Geosciences, 2005, Vol 31/5 pp 599-605
- **Diviaco P.**, Wardell N. "Reprocessing and dissemination of Antarctic Seismic Data" Terra Antarctica reports 2003,9 133,136
- Wardell N., **Diviaco P.**, Sinceri R. "Pre-processing techniques for marine Very High Resolution 3D (VHR3D) seismic data" First Break Luglio 2002

#### Thesis ---

- P.Diviaco "Reprocessing avanzato di dati sismici CROP, nell' area del Blocco Sardo-Corso, Tirreno settentrionale ed Arcipelago toscano" tesi di dottorato
- P.Diviaco "Inversione sismica dell'evoluzione di un bacino, validazione quantitativa su workstation di modelli sismici a riflessione" Tesi di laurea
- P.Diviaco "Implementazione del metodo GRM per l'interpretazione di dati di sismica a rifrazione" Tesina di Laurea