

PERSONAL INFORMATION

Giovanni Costa



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Sex Male | Date of birth 28/03/1957 | Nationality Italian

WORK EXPERIENCE

- 2024-** **associate professor**
 University of Trieste
 Geophysics (GEO10)
- 2000-2024** **Permanent researcher**
 University of Trieste
 Geophysics (GEO10)
- 1999-2000** **Technician coordinator**
 University of Trieste
- 1994-97** **Consultant at International Center for Theoretical Physics Trieste (ICTP).**
 International Center for Theoretical Physics Trieste (ICTP).
- 1990-91** **External collaborator, for geophysics studies**
 "International Center for Earth, Environmental and Marine Sciences and Technologies (ICEM)" (ICS), Miramar (Trieste.)
- 1989-99** **Graduate technician**
 Dipartimento di Scienze della Terra, University of Trieste
- 1988-89** **Visiting Professor**
 International School for Advanced Studied (S.I.S.S.A.)
- 1983-85** **Visiting Professor**
 International School for Advanced Studied (S.I.S.S.A.)
- 1983** **External collaborator, for geophysics studies**
 Istituto di Miniere e Geofisica Applicata, University of Trieste

EDUCATION AND TRAINING

- 1985-88** **Phd in Geophysics**
 University of Trieste
- 1983** **Graduated in Geological Sciences**
 University of Trieste

TEACHING COURSES

- 2021-2022** **MICROZONAZIONE SISMICA**
 University of Trieste
- 2023** **MICROZONATION**
 University of Trieste
- 2013-2023** **SOLID EARTH'S PHYSICS**
 University of Trieste
- 2012-2023** **SEISMOMETRY AND SEISMIC MONITORING**
 University of Trieste
- 2010-2012** **SEISMOMETRY AND APPLIED SEISMOLOGY**

- University of Trieste
- 2003-2010** **SEISMOMETRY**
University of Trieste
- 2013** Lecturer in the “School on Earthquake and Tsunami Hazard and Risk”, organized by ICTP - Université des Sciences et de Technologie Hourri Boumediène, Algeri, Algeria, December 9-22, 2013.

PROJECT MANAGEMENT

- 2023** Scientific responsible for the Mathematics and Geosciences Department of the project JRU EPOS Italia - ACCORDO DI RICERCA PER IL SUPPORTO ALLO SVILUPPO DI SERVIZI PER CONDIVISIONE DATI
- 2022** Scientific responsible for the Mathematics and Geosciences Department of the project MEET Monitoring Earth's Evolution and Tectonics, PNRR Progetti di ricerca Piano Nazionale di Ripresa e Resilienza.
- 2021** Scientific responsible for the Mathematics and Geosciences Department of the project “1. Sistema per lo scambio, la gestione e la condivisione istituzionale dei metadati. 2. North Eastern Italy Thrust Faults Observatory (NITRO). 3. Strutturazione comunità dei Laboratori di EPOS Italia – CoreLoggingLAB.”
- 2020** Scientific responsible for the Mathematics and Geosciences Department of the project “Supporto Istituzionale alla DDSS provision sismologica dei Service Providers Italiani in EPOS (European Plate Observing System) ”
- 2020** Scientific responsible for the Mathematics and Geosciences Department of the project “North Eastern Italy Trust Faults Observatory (NITRO)”
- 2012-2023** Scientific responsible for the Mathematics and Geosciences Department for the collaboration agreement between the Presidenza del Consiglio dei Ministri – Dipartimento di Protezione Civile and the Dipartimento di Matematica e Geoscienze for the implementation of activities aimed at the operation of the RAN, with particular regard to the maintenance of the RAN in Friuli-Venezia Giulia, the technical-scientific support on the Antelope application and the sharing of RAF data, for the pursuit of the common public interest of civil protection. Financing € 250,000.00 per year approximately.
- 2018-2021** Scientific responsible for the Geoscience Department for the realization of the Interreg V Italia/Austria project “ARMONIA”
- 2016-2019** Scientific responsible for the Geoscience Department for the Dipartimento di Matematica e Geoscienze of the agreement among the Protezione Civile of Regione FVG, OGS, Dipartimento di Matematica e Geoscienze of the Università degli Studi di Trieste and the Dipartimento Politecnico di Ingegneria e Architettura dell'Università degli Studi di Udine for: LA COLLABORAZIONE NELL'AMBITO DEL PROGETTO DI MONITORAGGIO DIFFUSO DI EDIFICI “SENTINELLA” SUL TERRITORIO REGIONALE A SUPPORTO DELLA PREVENZIONE E GESTIONE DI EMERGENZE SISMICHE NELLA REGIONE FRIULI VENEZIA GIULIA
- 2013** Scientific responsible of the consulting contract at the Council for Geoscience – Pretoria Sud-Africa
- 2012-2013** Scientific responsible for the Geoscience Department for the project ProCiv-INGV Progetto S1 – “Miglioramento delle conoscenze per la definizione del potenziale sismogenico”

- 2009-2012** Scientific responsible for the Geoscience Department for the realization of the Interreg IVA Italia/Austria project "HAREIA - Historical And Recent Earthquakes in Italy and Austria"
- 2007-2009** Scientific responsible for the Earth Science Department of the project ProCiv-INGV Progetto S3 - "Valutazione rapida dei parametri e degli effetti dei forti terremoti in Italia e nel Mediterraneo"
- 2004-2006** Scientific responsible for the Earth Science Department of the project ProCiv-INGV Progetto S4 "Stima dello scuotimento in tempo reale o quasi reale per terremoti significativi in territorio nazionale"
- 2004** PRIN Participant to the research program: "Il modello geofisico multiscala della Terra al di sopra della litosfera in Italia e nelle regioni circostanti e l'evoluzione temporale della sua sismicità"
- 2001-2006** Scientific responsible for the Earth Science Department for the realization of the Interreg IIIa Italia/Austria project "TRANS-NATIONAL SEISMOLOGICAL NETWORKS IN THE SOUTH-EASTERN ALPS"
- 2001** PRIN Participant to the research program: "Dinamica dei processi geologici in atto nel Mediterraneo Centrale: dati e modelli geofisici"
- 2002** PRIN Participant to the research program: "Approccio multiscala per lo studio della sismicità e struttura della litosfera-astenosfera del settore settentrionale dell'Adria: sismogenesi e implicazioni geodinamiche."
- 1997** Scientific responsible of the contract CNR (97.00507.PF54), Gruppo Nazionale per la Difesa dai Terremoti, per la ricerca: "Modellazione del processo elastico e del rilascio di energia sismica nel territorio italiano"
- 1996** Scientific responsible of the contract CNR (96.00358.02), Comitato Nazionale Scienze Fisiche, per il progetto coordinato "Misure in situ dei parametri dinamici del terreno"
- 1993** Scientific responsible of the contract CNR (93.01880.12), Comitato Nazionale scienze e tecnologia informazione, per la ricerca "Sviluppo ed applicazione di codici paralleli per la modellazione 3-D della litosfera e delle sorgenti sismiche"
- 1992-93-94** Scientific responsible of the contract CNR (92.01445.02, 93.01409.02, 94.00887.02), Comitato Nazionale Scienze Fisiche, per la ricerca: "Influenza dei parametri fisici dell'acqua sulla propagazione di onde in ambiente marino"

ORGANISATIONAL / MANAGERIAL SKILLS

- 2021** Organization of the annual online international meeting of the Interreg ARMONIA project "ARMONIA: UN PROGETTO PER FARE RETE IN TEMA DI PREVENZIONE SISMOLOGICA"
- 2021** Trieste NEXT stand organization "SICUREZZA SISMICA terremoti, reti di monitoraggio sismico e mappe di scuotimento"
- 2020** Organization of the ESOF 2020 event "Terremoti e protezione civile. Il ruolo della ricerca universitaria sull'emergenza sismica." Trieste - Sala Bazlen, Palazzo Gopcevich
- 2019** Organization of the international meeting Antelope User Group meeting, Dipartimento di Matematica e Geoscienze, Taormina - Hotel Sole Castello.
- 2013** Co-conveners of IASPEI symposium during the Scientific Assembly in Gothenburg, Sweden
- 2012** Organization of the international meeting Antelope User Group meeting, Dipartimento di Matematica e Geoscienze, University of Trieste

- 2007 Organization of the international meeting Antelope User Group meeting, Dipartimento di Matematica e Geoscienze, University of Trieste
- 2004 Organization of the international meeting Antelope User Group meeting, Dipartimento di Matematica e Geoscienze, University of Trieste

MEMBERSHIPS

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- Representative of the Dep. Mathematics and Geosciences in the JRU -EPOS Italy
- Representative of the Dep. Mathematics and Geosciences in the AlpArray initiative.
- 2013 Independent expert evaluator of project proposals with regards to: Talents for an international house (TALENTS)", 7th Framework Programme – "People" Specific Programme – FP7 Marie Curie Actions
- 2013-2014 Coordinator of the Collegio Docenti of PhD course "GEOSCIENZE" at the Dipartimento di Matematica e Geoscienze dell'Università di Trieste
- 2011 Coordinator of the Collegio Docenti of PhD course "GEOSCIENZE" at the Dipartimento di Matematica e Geoscienze dell'Università di Trieste
- 2011 Commission member for the assignment of PhD title (Università "Federico II" di Napoli)
- 2008-2012 Member of collegio docenti Dottorato "GEOSCIENZE" – Università degli Studi di Trieste
- 2008-2012 Member of collegio docenti Dottorato "GEOFISICA DELLA LITOSFERA E GEODINAMICA" – Università degli Studi di Trieste.
- 2010 Independent expert evaluator of project proposals with regards to: Talents for an international house (TALENTS)", 7th Framework Programme – "People" Specific Programme – FP7 Marie Curie Actions
- 2007 Commission member for the assignment of PhD title (Università degli Studi di Genova).
- 2005 Commission member for the comparative evaluation: Researcher, num. positions: 1, GEO10, Università degli Studi di GENOVA, Facoltà di SCIENZE MATEMATICHE FISICHE e NATURALI.
- 2002 Commission member for the comparative evaluation: Researcher, num. positions: 1, GEO10, Università degli Studi di BARI ALDO MORO, Facoltà di SCIENZE MATEMATICHE FISICHE e NATURALI

PUBBLICATIONS author of more than 140 papers in international and national journals

PUBBLICATIONS last 3 years

- 2024 Ertuncay, Deniz, Costa, Giovanni (2024). Analysis of impulsive ground motions from February 2023 Kahramanmaraş earthquake sequence. BULLETIN OF EARTHQUAKE ENGINEERING, vol. S.I. February 6, 2023, Kahramanmaraş-Turkiye earthquakes/2024, p. "- ", ISSN: 1570-761X, doi: 10.1007/s10518-024-01897-
- 2024 Pazzi, Veronica, Beltrame, Chantal, Taverna, Perla, Peressi, Gabriele, Costa, Giovanni (2024). Are the Italian microzonation level 2 abacuses applicable in the Friuli Venezia Giulia (Italy) plain? Comparison between the national abacuses and the numerically simulated amplification factors and between the derived elastic response spectra. JOURNAL OF SEISMOLOGY, vol. 28/2024, p. 281-301, ISSN: 1383-4649, doi: 10.1007/s10950-024-10212-9
- 2024 Simone Francesco Fornasari, Veronica Pazzi, Giovanni Costa (2024). Neural-Network and Multivariate-Normal-Distribution Hybrid Method for Real-Time Ground-Shaking Reconstruction. BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol. 114, p. 2912-

- 2925, ISSN: 0037-1106, doi: 10.1785/0120240095
- 2024** Deniz Ertuncay, Andrea De Lorenzo, Giovanni Costa (2024). Seismic Signal Discrimination of Earthquakes and Quarry Blasts in North-East Italy Using Deep Neural Networks. PURE AND APPLIED GEOPHYSICS, vol. 181/2024, p. 1139-1151, ISSN: 0033-4553, doi: 10.1007/s00024-024-03440-0
- 2024** Deniz Ertuncay, Andrea De Lorenzo, Giovanni Costa (2024). Seismic Signal Discrimination of Earthquakes and Quarry Blasts in North-East Italy Using Deep Neural Networks. PURE AND APPLIED GEOPHYSICS, vol. 181/2024, p. 1139-1151, ISSN: 0033-4553, doi: 10.1007/s00024-024-03440-0
- 2023** Simone Francesco Fornasari, Deniz Ertuncay, Giovanni Costa (2023). Seismic background noise levels in the Italian strong-motion network. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 23, p. 3219-3234, ISSN: 1684-9981, doi: 10.5194/nhess-23-3219-2023
- 2023** Cuius, Arianna, Meng, Haoran, Saraò, Angela, Costa, Giovanni (2023). Sensitivity of the second seismic moments resolution to determine the fault parameters of moderate earthquakes. FRONTIERS IN EARTH SCIENCE, vol. 11, p. 1-13, ISSN: 2296-6463, doi: 10.3389/feart.2023.119822
- 2023** Cataldi, Laura, Poggi, Valerio, Costa, Giovanni, Parolai, Stefano, Edwards, Benjamin (2023). Parametric spectral inversion of seismic source, path and site parameters: application to northeast Italy. GEOPHYSICAL JOURNAL INTERNATIONAL, vol. 232/2023, p. 1926-1943, ISSN: 0956-540X, doi: 10.1093/gji/ggac431 Cataldi, Laura, Poggi, Valerio, Costa, Giovanni, Parolai, Stefano, Edwards, Benjamin
- 2022** Near-Real-Time Strong Motion Acquisition at National Scale and Automatic Analysis. SENSORS, vol. 22, p. "-", ISSN: 1424-8220, doi: 10.3390/s22155699 Costa, Giovanni, Brondi, Piero, Cataldi, Laura, Cirilli, Stefano, Cuius, Arianna, Ertuncay, Deniz, Falconer, Piero, Filippi, Luisa, Fornasari, Simone Francesco, Pazzi, Veronica, Turpaud, Philippe
- 2022** A machine-learning approach for the reconstruction of ground shaking fields in real-time. GEOPHYSICAL RESEARCH ABSTRACTS, p. 2673, ISSN: 1607-7962, doi: 10.5194/egusphere-egu22-2673 Simone Francesco Fornasari, Giovanni Costa, Veronica Pazzi
- 2021** Determination of near-fault impulsive signals with multivariate naïve Bayes method. DOI:10.1007/s11069-021-04755-0. pp.1763-1780. In NATURAL HAZARDS - ISSN:0921-030X Ertuncay, Deniz; Costa, Giovanni
- 2021** Discrimination of quarry blasts from earthquakes using artificial neural networks. DOI:10.5194/egusphere-egu21-1285. pp.1-1. In Geophysical Research Abstracts Ertuncay, Deniz; De Lorenzo, Andrea; Costa, Giovanni
- 2021** Estimation of MCS intensity for Italy from high quality accelerometric data, using GMICES and Gaussian Naïve Bayes Classifiers. DOI:10.1007/s10518-021-01064-6. pp."-""-. In BULLETIN OF EARTHQUAKE ENGINEERING - ISSN:1570-761X Cataldi, Laura; Tiberi, Lara; Costa, Giovanni
- 2021** Impulsive Signals Produced by Earthquakes in Italy and Their Potential Relation with Site Effects and Structural Damage. DOI:10.3390/geosciences11060261. pp.261-286. In GEOSCIENCES - ISSN:2076-3263 vol. 11 (6) Ertuncay, Deniz; Malisan, Petra; Costa, Giovanni; Grimaz, Stefano
- 2021** Web-based macroseismic intensity study in Turkey – entries on Ekşi Sözlük. DOI:10.5194/gc-4-69-2021. pp.69-81. In GEOSCIENCE COMMUNICATION - ISSN:2569-7110 vol. 4 (1) Ertuncay, Deniz; Cataldi, Laura; Costa, Giovanni
- 2021** Regional and site-specific GMPEs for Italian territory. pp."-""-. In 27th IUGG General Assembly Proceedings Tiberi, Lara; Cataldi, Laura; Costa, Giovanni; De Nardis, Rita; Filippi, Luisa; Lavecchia, Giuseppin...Conference date:8-18 July 2019
- 2021** Identification of Near-Fault Impulsive Signals and Their Initiation and Termination Positions

with Convolutional Neural Networks. DOI:10.3390/geosciences11090388. pp.1-18. In GEOSCIENCES - ISSN:2076-3263 vol. 11 (9) Ertuncay, Deniz; De Lorenzo, Andrea; Costa, Giovanni

2021 Improving Cross-Border Seismic Research: The Central and Eastern Europe Earthquake Research Network (CE3RN). DOI:10.1785/0220200374. pp.1-9. In SEISMOLOGICAL RESEARCH LETTERS - ISSN:0895-0695 Lenhardt, Wolfgang A.; Pesaresi, Damiano; Živčić, Mladen; Costa, Giovanni; Fiket, Tomislav; Bondár, ...

2020 Determination of Near Fault Velocity Pulses with Multivariate Naïve Bayes Method. DOI:10.5194/egusphere-egu2020-4810. pp.1-1. In Geophysical Research Abstracts Ertuncay, Deniz; Costa, Giovanni

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1

Communication skills :good communication skills gained through my experience as researcher and university lecturer

Computer skills clusters management, operating systems linux, microsoft
Programmer in fortran, C++, python, perl, tcl

Driving licence ▪ B