

Detailed Program of oral presentation
(last update Feb 7th)

ROOM A1 - February 13

S1.2
Volcanoes and geothermal fields

Mimmo Palano (INGV)
Francesca Forni (UniMI)

INTRODUCTION

14:00

Determining the magmatic or hydrothermal nature of volcano unrest through Bayesian joint inversion of ground displacements and gravity changes. **14:15**
E. Rivalta, M. Nikkhoo

Dike-arrest vs dike-propagation: new insights from the Younger Stampar eruption (13th Century), SW Iceland **14:30**
N. Corti, F. L. Bonali, E. Russo, K. Drymoni, F. Pasquarè Mariotto, A. Gudmundsson, A. Tibaldi

Nonlinear convective motion of the asthenosphere and the lithosphere melting. A model for the birth of a volcano **14:45**
C. Godano, S. Carlino, F. Oliveri and C. F. Mufanò

Thermo-poro-viscoelastic deformation sources **15:00**
M. Nespoli, M.E. Belardinelli, M. Bonafede

The current unrest of Campi Flegrei caldera: seismicity and ground deformation **15:15**
Anna Tramelli, A. Benincasa, F. Bianco, A. Bobbio, C. Buonocunto, S. Caliro, A. Caputo, V. Convertito, P. Cusano, G. Dalla Via, P. De Martino, D. Delle Donne, R. Esposito, S. Gammaldi, G. Gaudiosi, D. Galluzzo, S. Guardato, D. Lo Bascio, R. Manzo, R. Nappi, L. Nardone, M. Orazi, R. Peluso, S. Petrosino, M.G. Soldovieri P. Ricciolino, G. Scarpato, M.A. Di Vito

ROOM A2 - February 13

S2.1
Approaches for the evaluation of seismic hazard models in Italy

Daniela Di Bucci
Dario Albarello
Bruno Pace

14:00

HAZARD WORKSHOP
(from 15.00 to 19.00)

Discussion on long term PSHA – a workshop **15:00**
Daniela Di Bucci, Dario Albarello, Bruno Pace

The applications of seismic hazard assessments in civil society and the impact of its variations **15:15**
Mauro Dolce

ROOM A3 - February 13

S1.3
Physical models for the Solid Earth and integration between modeling and data of different nature

Anna Maria Marotta (UniMI)
Carla Braitenberg (UniTS)
Barbara Orecchio (UniME)

14:00 On constraining 3D mantle flow patterns in subduction, mid-ocean-ridge, and plume environments with teleseismic body wave data.
M. Faccenda, B. P. VanderBeek





14:15 Exploring Mantle Dynamics of the Cascadia Subduction System through Anisotropic Tomography with Transdimensional Inference Methods
Brandon P. VanderBeek, Gianmarco Del Piccolo, Manuele Faccenda






14:30 The gravitational signature of the dynamics of oceanization in the Gulf of Aden.
A. M. Marotta, R. Barzaghi, A. Bollino, A. Regorda, R. Sabadini

14:45 A dynamic identification of continuous discontinuities in geodynamic numerical models.
V. Fedeli, A.M. Marotta

15:00 Strength of the lithosphere derived by geological and geophysical data: the Graham Land (Antarctic Peninsula) case study.
F. Linsalata, D. Melini, G. Spada

15:15 How elastic is elastic deformation (in Greenland)?
A. Consorzi, D. Melini, G. Spada

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| <p>Twenty years of Campi Flegrei seismic monitoring by Istituto Nazionale di Geofisica e Vulcanologia- Osservatorio Vesuviano: history, performances and future developments</p> <p>M. Orazi, D. Galluzzo, A. Benincasa, F. Bianco, A. Bobbio, G. Borriello, C. Buonocunto, M. Capello, A. Caputo, M. Castellano, V. Convertito, P. Cusano, G. Dalla Via, L. D'Auria, W. De Cesare, D. Delle Donne, A. Di Filippo, F. Giudicepietro, S. Guardato, R. Riccio, R. Esposito, G. Gaudiosi, M. La Rocca, F. Liguoro, D. Lo Bascio, M. Martini, R. Nappi, L. Nardone, R. Peluso, S. Petrosino, P. Ricciolino, G. Scarpato, M.G. Soldovieri, M.A. Di Vito</p> | <p>15:30 Uncertainty in source parameters and seismic hazard estimation</p> <p>Stefano Parolai</p> | <p>15:30 Joint inversion of gravity and magnetic data of the Cornubian Batholith (South-West UK).</p> <p>G. Maurizio, C. Braitenberg</p> |
| <p>b value tomography at Campi Flegrei: enlightening different rheological behaviour in volcanic areas</p> <p>A. Tramelli, V. Convertito and C. Godano</p> | <p>15:45 The use of historical and geological data in seismic hazard assessment: available data, modeling opportunities, and uncertainties involved</p> <p>G. Valensise</p> | <p>15:45 Update of the Northern Apennines and Southern Alps velocity field from historical GNSS measurement to the “0 point”.</p> <p>F. Carnemolla, F. Brighenti, G. De Guidi, A. Di Pietro, P. Fabris, S. Giuffrida, A. Magrin, G. Rossi, D. Russo, L. Tunini, D. Zuliani</p> |
| <p>Dynamic and static strain sensitivity of velocity variations at Ischia Island, southern Italy</p>  <p>S. Tarantino, P. Poli, M. Vassallo, N. D'Agostino</p> | <p>16:00 Causes and ways for modelling complexity in fault-based seismic hazard studies</p> <p>Bruno Pace</p> | <p>16:00 Investigating the Tonga-Kermadec subduction zone through the study of the preparation phase of the June 15, 2019, M7.2 Kermadec Islands (New Zealand) earthquake and the January 15 2022 Hunga Tonga-Hunga Ha'apai eruption</p>  <p>Serena D'Arcangelo, Mauro Regi, Angelo De Santis, Loredana Perrone, Gianfranco Cianchini, Maurizio Soldani, Alessandro Piscini, Cristiano Fidani, Dario Sabbagh, Stefania Lepidi, Domenico Di Mauro</p> |
| <p>How multiple observations tracked the onset and evolution of the 2021-2023 unrest at Vulcano Island (Southern Italy), and unveiled the processes behind it</p> <p>C. Federico, A. Paonita, S. Bellomo, R. M. R. Di Martino, A. Gattuso, L. La Pica, G. Lazzaro, M. Longo, G. Pecoraino, A. F. Pisciotta, F. Sortino.</p> | <p>16:15 Site-specific checks of probabilistic seismic hazard models with macroseismic historical records</p> <p>Roberto Paolucci</p> | <p>16:15 Monitoring the Tonga volcano starting from the unrests of 2014/2015 to the 2021/2022 explosion using Sentinels.</p> <p>Carla Braitenberg</p> |
| <p>The state of art of the temperature monitoring network on La Fossa cone (Aeolian Islands, Italy)</p> <p>I.S. Diliberto, M.G. Di Figlia</p> | <p>16:30 Some thoughts on the testing phase of seismic hazard models</p> <p>W. Marzocchi</p> | <p>16:30 On opposite sides of Naples: an intriguing contemporaneous onset of deep deflation below Vesuvio and the ongoing Campi Flegrei uplift.</p> <p>A. Amoruso, L. Crescentini</p> |
| <p>Automated detection, characterization, and localization of Very Long-Period seismic events specifically designed for volcanic monitoring applications on Stromboli Island.</p>  <p>S. Gammaldi, D. Delle Donne, P. Cantiello, W. De Cesare, A. M. Esposito, R. Peluso, M. Orazi.</p> | <p>16:45 How different PSHA is different enough?</p> <p>I. Iervolino</p> | <p>16:45 Thermo-poro-elastic modeling of the inflation phase during the 2021 Vulcano Island (Italy) unrest.</p>  <p>S. C. Stissi, G. Currenti, F. Cannavò, R. Napoli</p> |

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| <p>Trans-dimensional Mt. Etna P-wave anisotropic imaging</p>  <p>G. Del Piccolo, R. Lo Bue, B.P. VanderBeek, M. Faccenda, O. Cocina, M. Firetto Carlino, E. Giampiccolo, A. Morelli, J.S. Byrnes</p> | <p>17:00 Earthquake sequences and long-term seismic hazard maps: an oximoron? P. Bazzurro</p> | <p>17:00 Geofluids as a possible unconventional tool for Seismic Hazard Assessment.</p> <p>G. Martinelli, L. Pierotti, G. Facca, F. Gherardi</p> |
| DISCUSSION | | |
| <p>Monitoring of the radon emission from the surface soil in the Maccalube natural reserve</p> <p>M. Falanga, S. Mancini, M. Guida, P. Madonia, P. Cusano</p> | <p>17:15</p> | <p>17:15 The Attenuation and Scattering Signature of Fluid Reservoirs and Tectonic Interactions in the Central-Southern Apennines (Italy).</p>  <p>D. Talone, L. De Siena, G. Lavecchia, R. de Nardis</p> |
| <p>Preliminary characterization of the area of the Salse del Dragone mud volcano (Northern Italy) through surface-wave seismic prospecting</p> <p>E. Paolucci, M. Zanetti, M Antonellini, A. Armigliato, N. Carfagna, F. Zaniboni, A. Piombo</p> | <p>17:30</p> | <p>17:30 The coda attenuation method reveals a very high attenuating crust in the High Agri Valley (Southern Italy).</p> <p>S. Lucente, V. Serlenga, S. de Lorenzo, E. del Pezzo, M. Filippucci, T. Ninivaggi, T.A. Stabile, A. Tallarico</p> |
| <p>HVSR analysis to investigate a possible correlation to a gas shallow reservoir in a mud volcanic field: the case of Nirano (MO)</p> <p>A. Brindisi, D. Albarello, N. Carfagna, E. Paolucci</p> | <p>17:45</p> | <p>17:45 First evidence of water transport in the Earth's mantle from seismograms of Southern Tyrrhenian earthquakes.</p>  <p>T. Ninivaggi, G. Selvaggi, S. Mazza, M. Filippucci, F. Tursi, W. Czuba</p> |
| <p>Inverse modelling as a powerful tool for estimating gas flow emission rate from stationary hydrothermal vents</p> <p>A. Semprebello, G. Lazzaro, C. Caruso, S. Scirè Scappuzzo, S. Morici, A. Gattuso, M. Longo</p>  | <p>18:00</p> | <p>18:00 Preliminary single-station template matching seismic catalogue for the area of Everest (Himalaya).</p> <p>R Percacci, A Vuan, G Verza, M P Plasencia, D Sandron, F Pettenati</p> |
| <p>Study of Etna lava flow dynamics using Sar and optical satellite data and applicability of the approach in other volcanic settings</p> <p>L. Beccaro, E. Ferrentino, M. Albano, C. Tolomei, C. Spinetti, G. Pezzo, M. Palano, C. Chiarabba</p> | <p>18:15</p> | <p>18:15 Space Weather: Central Italy Geoelectric-Field Mapping.</p> <p>G. Pignatiello, I. Coco, M. De Girolamo, F. Giannattasio, V. Materni, L. Miconi, G. Romano, V. Romano, V. Sapia, S. Tripaldi, R. Tozzi, A. Siniscalchi, P. De Michelis</p> |
| DISCUSSION | <p>18:30</p> | <p>18:30 SAR-TOOL: A new open-source software for the analysis of geospatial data in volcano-tectonic fields.</p> <p>S. D'Amico, F. Guglielmino</p>  |
| DISCUSSION | | |
| <p>18:45</p> | | |

ROOM A1 - February 14

S1.2 Volcanoes and geothermal fields

Mimmo Palano (INGV)
Francesca Forni (UniMI)

Imaging the North-South deformation through the application of potential theory to InSAR measurements

A. Barone, M. Fedi, P. Mastro, A. Pepe, Tizzani, R. Castaldo

Mapping of volcanic deposits through the use of satellite techniques: the case of 2021 Mt. Etna eruptions

M. Dozzo, G. Ganci, S. Scollo, F. Lucchi



An innovative system for the worldwide monitoring of volcanic thermal anomalies through Sentinel-2 and Landsat 8/9 data integration

F. Marchese, N. Genzano, N. Pergola

An AI-based emulator to enhance SPH lava flows simulations

E. Amato, V. Zago, C. Del Negro



Unveiling hidden volcano dynamics with Artificial Intelligence (AI) and Earth Observation (EO)

S. Cariello, C. Corradino, F. Torrisi, G. S. Di Bella, C. Del Negro



DISCUSSION

ROOM A2 - February 14

S2.1 Towards new approaches to estimate earthquake and tsunami hazard: a discussion

Daniela Di Bucci
Dario Albarello
Bruno Pace

09:00 An improved workflow to efficiently compute local seismic probabilistic tsunami analysis (SPTHA): a case study for the harbour of Ravenna, Italy

E. Baglione, B. Brizuela, M. Volpe, A. Armigliato, F. Zaniboni, R. Tonini, J. Selva



09:15 A data-driven parametrization of source-directivity effects: the study case of Central Italy

L. Colavitti, G. Lanzano, S. Sgobba, F. Pacor

09:30 Performance of the Ground Motion Models to predict the significant durations in Italy

B. Shoaib, F. Ramadan, G. Lanzano, M. Sadek, H. El Ghoche



09:45 Time-Space Evolution of the Groningen Gas Field in Terms of b-Value: Insights and Implications for Seismic Hazard

L. Gulia

10:00 The estimation of b-value of the frequency-magnitude distribution and of its one-sigma intervals from binned magnitude data

S. Tinti, P. Gasperini

10:15 The Multi Synthetic Catalog Analysis (MSCA) as a tool to evaluate seismic hazard, risk and resilience

T. Tufaro

10:30 Fault System Finite-Element Geodynamical Modelling for Seismic Hazard Analysis of the Central Italian Apennines

A. Rood, M. Pagani, D. Di Bucci

ROOM A3 - February 14

S3.3 Theoretical and methodological development in geophysics

Andrea Tognarelli
Luca Masnaghetti
Gianluca Gola

09:00 Numerical problems of the uncertainty assessment of the Sibson interpolation method

M. Iurcev, F. Pettenati

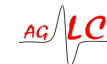
09:15 ShellSet – Parallel dynamic neotectonic modelling

J. B. May, P. Bird, M. M. C. Carafa



09:30 Differential arrival times for event location with DAS data

E. Bozzi, L. Gebraad, A. Fichtner, N. Piana Agostinetti, G. Saccorotti, T. Kiers, T. Nishimura



09:45 Offshore seismic monitoring: the Rospo seismic station as a pilot case study for the InSEA project.

A. Mantovani, A. Costanza, G. Fertitta, G. Tusa

10:00 Amplitude and traveltimes inversion for monochannel Boomer surveys

A. Vesnaver, L. Baradello

10:15 Wavelet transform spectral analysis to estimate the depth of gravity and magnetic sources

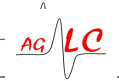
M.A. Abbas, M. Milano, D.F. Barbolla, M. Fedi

10:30 Greenland and Antarctica ice mass balance (2002-2017) through source decomposition in hypercompact atoms.

M. Maiolino, M. Fedi, G. Florio

| | 10:45 | DISCUSSION | 10:45 | An innovative machine learning algorithm for gravity modelling C. Messina, L. Bianco, M. Fedi,  |
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| GENERAL ASSEMBLY | 11:00 | GENERAL ASSEMBLY | 11:00 | GENERAL ASSEMBLY |
| Lunch | 13:00 | Lunch | 13:00 | Lunch |
| S1.1 Recent advances in the study of earthquakes, faults and seismogenic processes in natural and experimental faults <i>Paolo Galli (DPC)</i> <i>Massimo Cocco (INGV)</i> <i>Luisa Valoroso (INGV)</i> | | S2.1 Towards new approaches to estimate earthquake and tsunami hazard: a discussion <i>Daniela Di Bucci</i> <i>Dario Albarello</i> <i>Bruno Pace</i> | | S3.3 Theoretical and methodological development in geophysics <i>Andrea Tognarelli</i> <i>Luca Masnaghetti</i> <i>Gianluca Gola</i> |
| INTRODUCTION | 14:00 | | 14:00 | Filling active seismic null space with LSTM G. Roncoroni, I. Deiana, E. Forte, M. Pipan  |
| Fault (re)activation, fluid-induced seismic activity and seismogenic potential in the Val d'Agri (southern Italy) A. Lavecchia, V. Serlenga, M. Filippucci, T. Stabile, G. Prosser, A. Tallarico | 14:15 | | 14:15 | Ensemble-based Acoustic Full Waveform Inversion: A Synthetic Data Application F. Macelloni, M.H. Altaf, M. Aleardi, E.M. Stucchi  |
| Vertical distributions of underground pore pressures from boreholes in the Southern Apennines and their seismotectonic implications E. Vitagliano, N. D'Agostino, L. Improta, L. Pizzino | 14:30 | | 14:30 | A data-driven supervised neural network approach for surface waves inversion: synthetic and field data applications F. Rincon, S. Berti, M. Aleardi, E. Stucchi  |
| A natural pump-probe experiment reveals nonlinear elastic properties along the Irpinia Fault, Southern Apennines N. D'Agostino, Stefania Tarantino, P. Poli, M. Vassallo, G. Ventafridda, G. Festa, A. Zollo | 14:45 | | 14:45 | Probabilistic approach to full-waveform inversion of surface waves: a real data application S. Berti, M. Aleardi, E. Stucchi  |
| Seismic cycle in bituminous dolostones (Central Apennines, Italy) M. Chinello, E. Bersan, M. Fondriest, T. Tesei, G. Di Toro | 15:00 | Statistically interpreting multiple observations derived from one or more geophysical monitoring networks C. Fidani | 15:00 | Bayesian imaging method for towed transient electromagnetic data using probabilistic neural networks J. Chen, G. Fiandaca  |
| Are productive gas fields anticorrelated with large seismogenic faults? Implications for hydrocarbon exploitation and seismic hazard G. Valensise, F. Donda, A. Tamaro, S. Parolai | 15:15 | Comparison between alarm-based and probability-based earthquake forecasting methods E. Biondini and P. Gasperini | 15:15 | Automated integration of AEM data, VES and borehole logs S. Galli, F. Schaars, F. Smits, L. Borst, A. Rapiti, G. Fiandaca |

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| Detect and characterize swarm-like seismicity L. Passarelli, S. Cesca, L. Mizrahi, G. Petersen | 15:30 | The new version of the Foreshock Traffic Light System L. Gulia, S. Wiemer, E. Biondini, G. | 15:30 | Modelling temperature effect in time-lapse DC monitoring experiments through inversion of thermal diffusivity A. Signora, G. Fiandaca |
| Anatomy of clustering from parametric space-time analysis of seismicity G. Rossi, G. Bressan, C. Barnaba, A. Peresan | 15:45 | Do not call them foreshocks D Zaccagnino, L Telesca, C Doglioni | 15:45 | Full-decay spectral modelling of time-domain induced polarization decoupling model and forward meshes with EEMverter A. Bollino, G. Fiandaca |
| | | | 16:00 | EEMverter, a new 1D/2D/3D inversion tool for Electric and Electromagnetic data with focus on Induced Polarization G. Fiandaca, B. Zhang, J. Chen, A. Signora, F. Dauti, S. Galli, N. Sullivan, A. Bollino, A. Viezzoli |
| POSTER SESSION | 16:00 | POSTER SESSION | 16:00 | POSTER SESSION |
| Tracking the evolution of seismic sequences in the normal fault environment of Southern Apennines using deep catalogues F. Scotto di Uccio, M. Michele, C. Strumia, G. Festa, M. Surrone, Chiaraluca, N. D'Agostino, G. C. Beroza | 17:00 | Imprints of the Earth's gravity on recent seismic events in Ceneselli, Italy M. Campion, C. Fidani | 17:00 | ASSEMBLEA EAGE-SEG |
| Analysis of the 1982-2016 seismicity of Aswan region (south Egypt) TA Stabile, ER Fat-Helbary, V Serlenga, S Panebianco, P Tizzani, R Castaldo, L Telesca, EM El-Amin, H Ahmed | 17:15 | The database of the Catalogue of Strong Earthquakes in Italy and in the Mediterranean Area (CFTI): exploring historical seismology through modern web tools G. Tarabusi, C. Ciuccarelli, M.G. Bianchi, C. Zei, D. Mariotti, G. Sgattoni, R.C. Taccone, G. De Francesco, G. Ferrari, G. Valensise, CFTI working group. | 17:15 | |
| The first manually revised catalog of micro-seismicity of Co. Donegal (Ireland): defining baseline seismicity in a region of slow lithospheric deformation F. Riva, N. P. Agostinetti, C. Horan, S. Marzorati | 17:30 | Un confronto teorico tra scale macrosismiche utilizzate in Italia G. Vannucci, B. Lolli, P. Gasperini | 17:30 | CHALLENGE BOWL |
| Earthquake swarms frozen in an exhumed hydrothermal system (Bolfín Fault Zone, Chile) S. Masoch, G. Pennacchioni, M. Fondriest, R. Gomila, P. Poli, J. Cembrano, G. Di Toro | 17:45 | A comparison between moment magnitude scales P. Gasperini, B. Lolli | 17:45 | |
| Supervised and unsupervised machine learning approaches for identifying the preparatory process of moderate earthquakes at The Geysers, California A. G. Iaccarino, M. Picozzi | 18:00 | DISCUSSION | 18:00 | |
| What is in the INGV ISIDe online database before 16 April 2005? B. Lolli, G. Vannucci, P. Gasperini | 18:15 | | 18:15 | |
| DISCUSSION | 18:30 | | 18:30 | |



ROOM A1 - February 15

S1.1

Recent advances in the study of earthquakes, faults and seismogenic processes in natural and experimental faults

Paolo Galli (DPC)
Massimo Cocco (INGV)
Luisa Valoroso (INGV)

A re-analysis of micro-earthquakes for characterising debated faults in the Esaro valley (Northern Calabria)
H. Fernandez, G. D. Chiappetta, A. Schibuola, M. La Rocca, S. Gentili, L. Peruzza

Analysis and preliminary results of the Mw 4.9, Marradi seismic sequence (September 18th, 2023), in the northern Apennines, carried out by the BSI working group
A. Lisi, L. Arcoraci, P. Battelli, M. Berardi, B. Castello, D. Latorre, A. Marchetti, M. Michele, V. Misiti, A. Nardi, D. Piccinini, A. Rossi, Gruppo di lavoro del Bollettino Sismico Italiano** A. Battelli, B. Cantucci, C. Castellano,

OTRIONS seismic network after ten years of operation; the new seismic catalog

A. Ferreri, A. Romeo, R. Giannuzzi, G. Cecere, S. de Lorenzo, L. Falco, M. Filippucci, M. Michele, G. Selvaggi, A. Tallarico

3D Hypocenters relocation in high-resolution central Mediterranean velocity model

I. Menichelli, P. De Gori, C. Chiarabba



Monitoring tectonic environments with DAS: the case study of the Irpinia Near Fault Observatory

G. Festa, C. Strumia, F. Scotto di Uccio, A. Trabattoni

A novel approach to earthquake source characterization using DAS strain rate data acquired along optical fibre

C. Strumia, A. Trabattoni, M. Supino, M. Baillet, D. Rivet, G. Festa



ROOM A2 - February 15

S2.3

Risk Communication

Serena Tagliacozzo (IRPPS, CNR)
Valentina Rizzoli (CORIS, Sapienza University of Rome)

09:00 Seismic risk communication in Europe over the last two decades

G. Musacchio, A. Saraò, S. Falsaperla, A. Scolobig

09:15 Seismic risk perception in Italian hospitals: the role of non-structural elements

S. Zidarich, M.G. Sestito, M. Crescimbene, G. Musacchio, D. Reitano, D. Perrone, D. D'Angela, G. Magliulo

09:30 Schools-tailored activities to communicate seismic risk

M. G. Sestito, S. Zidarich, E. Ferrari, M. Longoni, F. Varchetta, F. Meroni, S. Lovati, D. Piccarreda, L. Zarrilli, S. Puccillo, M. Massa, S. Mirena, A. Goretti, G. Musacchio

09:45 "A Scuola di Terremoto": a targeted risk education project in Calabria (South Italy) to promote behavioural change.

E. Ercolani, R. Camassi, V. Pessina, F. Brasini, P. Del Gaudio, A. Giambattista, M. Lopez

10:00 Trust in authorities and experts as shaping factor of risk perception

R. Russo, M.V. Gargiulo, R. Iorio, G. Cavalca, P. Capuano

10:15 E se... (What if...) a game to learn about risk perception

M.V.Gargiulo, G.Woo, R.Russo, F.Napolitano, O.Amoroso, B.Massa, P.Capuano



ROOM A3 - February 15

S3.2

Near surface geophysics

Chiara Colombero
Michele Cercato
Emanuele Forte

09:00 Combined 3D surface wave and refraction analysis around the Scrovegni Chapel in Padua, Italy

I. Barone, M. Pavoni, J. T. F. Ting, J. Boaga, G. Cassiani, D. Dupuy, R. Deiana

09:15 P- and S-velocity 3D model for the characterisation of the subsurface beneath the village of Arquata del Tronto

G. Böhm, A. Affatato, L. Baradello, G. Brancatelli, E. Forlin, F. Meneghini

09:30 Combining active and passive methods to understand the seismic velocity distribution in a thick Quaternary succession of the Po Plain. (Terre del Reno, Ferrara, Italy)

G Di Giulio, L Minarelli, M Stefani, G Milana, G Tarabus, M Vassallo, S Amoroso, A Affatato, L Baradello, L Petronio

09:45 Statistical analysis between the experimental and theoretical HVSR curves using different models.









A. Tanzini, E. Paolucci, D. Albarello

10:00 Exploring rockfall precursors through unsupervised deep-learning clustering analysis

G.M. Adinolfi, C. Comina, S.C. Vinciguerra

10:15 Deep Electric Resistivity Tomography (DERT) on the Cazzaso Landslide

A. Bratus, F. Agliardi, O. Araujo, G.B. Crosta, G. Dattola, R.G. Francese, P. Frattini, M. Giorgi, F. Kranitz, S. Picotti

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| <p>Linking Seismicity, Geochemical And Environmental Data: The New Frontier Of Multiparametric Networks</p> <p>E. Ferrari, M. Massa, A.L. Rizzo, S. Lovati, F. Di Michele</p> | <p>10:30 Preparing for disasters through games: a worth taking bet?</p> <p>M. Giuffrè, M.S. Benigni, I. Gaudiosi, M. Mancini, M. Moscatelli</p> | <p>10:30 Integrating cross-gradient joint inversion of ERT and SRT data and unsupervised machine learning on structured meshes incorporating topography</p> <p>G. Penta de Peppo, M. Cercato, G. De Donno</p>  |
| DISCUSSION | | |
| | <p>10:45 Risk education and communication: the experience of serious games and Situated Learning Episodes (ELS) in Pandemic</p> <p>G.L. Piangiamore, A. Maramai</p> | <p>10:45 Characterizing groundwater springs in the Italian Alps: an integrated geological, geophysical, and hydrogeological approach</p> <p>A. Lucchelli, A. Signora, F. Dauti, S. Galli, M. Gisolo, G. Fiandaca</p> |
| LECTIO MAGISTRALIS | | |
| | <p>11:00 LECTIO MAGISTRALIS</p> <p>Unrest calderas: The Case of the Campi Flegrei caldera</p> <p>Francesca Bianco</p> | |
| <p>Studying the Viability of Kinematic Rupture Models and Source Time Functions with Dynamic Constraints</p> <p>M.E.Locchi, F. Mosconi, M.Supino, E.Casarotti, E.Tinti</p>  | <p>11:30 Towards the IT-ALERT implementation. Early warning and cell-broadcast systems in the context of risk and crisis communication</p> <p>L. Cugliari, A. Amato, A. Cerase, F.Comunello, M. Crescimbene</p>  | <p>11:30 Inductive Induced Polarization Effects: the Loupe EM synthetic case study</p> <p>F. Dauti, A. Viezzoli, G. Fiandaca</p> |
| <p>Modeling dynamic ruptures on extended faults for microearthquakes induced by fluid injection</p> <p>F. Mosconi, E. Tinti, E. Casarotti, A. A. Gabriel, R. Dorozhinskii, L. Dal Zilio, A.P. Rinaldi, M.Cocco</p>  | <p>11:45 Tsunami Ready: some steps for a people-centred tsunami risk approach</p> <p>L. Cugliari, A. Amato, C. Valbonesi, I. Moreschini, F. Romano, L. Graziani, S. Filosa, M. Crescimbene, F. La Longa</p> | <p>11:45 EEMstudio: processing and modelling of electric and electromagnetic data in a QGIS plugin</p> <p>N.A.L. Sullivan, A. Viezzoli, G. Fiandaca</p>  |
| <p>Stress drop scaling is still a very controversial topic: is it real or apparent?</p> <p>G. Calderoni</p> | <p>12:00 Tsunami risk perception of the touristic population of Stromboli Island: towards effective risk communication strategies</p> <p>I. Moreschini, L.Cugliari, L.Cerbara, F. La Longa, M. Crescimbene, A. Amato</p> | <p>12:00 Mapping surface/ground water interactions and embankment composition along the Po river with transient electromagnetics</p> <p>G Fiandaca, A Signora, S Galli, J Chen, C Compostella, M Gisolo, A Viezzoli</p> |
| <p>Estimating the source parameters of a moderate earthquake using the second seismic moments</p> <p>A. Cuius, A. Saraò, H. Meng, G. Costa</p>  | <p>12:15 Insights into risk communication from the analysis of earthquake light phenomena reports in Turkey and Morocco</p> <p>C. Fidani</p> | <p>12:15 Waterborne electromagnetics: two case studies</p> <p>S. Galli, A. Signora, J. Chen, F. Schaars, M. Grohen, G. Fiandaca</p> |
| <p>Seismic attenuation and stress on the San Andreas Fault at Parkfield: are we critical yet?</p> <p>L Malagnini, R M Nadeau, and T Parsons</p> | <p>12:30 From risk to safety for a resilient governance</p> <p>S. Grimaz, P. Malisan</p> | <p>12:30 Monitoring of the saline wedge in the Po di Goro river</p> <p>P. Boldrin, E. Ferrari, F. Droghetti, A. Bondesan, E. Rizzo</p>  |
| DISCUSSION | | |
| | <p>12:45 DISCUSSION</p> | <p>12:45 The Italian calibration and reference site for E & EM geophysical methods: The HydroGeosTe</p> <p>A. Signora, S. Galli, F. Dauti, A. Sullivan, A. Lucchelli, M. Gisolo, G. Flandaca</p>  |

Lunch

13:00

Lunch

13:00

Lunch**S1.1****Recent advances in the study of earthquakes, faults and seismogenic processes in natural and experimental faults**

Paolo Galli (DPC)
Massimo Cocco (INGV)
Luisa Valoroso (INGV)

Preliminary results of the Non-Double-Couple seismic sources in the Southern Apennines

P. Roselli, L. Scognamiglio, F. Di Luccio, M. Palano, G. Ventura

InSAR data analysis to investigate the 2009 post-seismic deformation in L'Aquila downtown

V. Guerriero, A. Sciortino, R. Marini, P. Mazzanti, M. Tallini

A new 3D seismotectonic model of the Pedepenninic Front between Parma and Bologna (Italy): new perspectives on Seismic Hazard Assessment

G. Carloni, G. Vignaroli, T. Gusmeo, L. Martelli, G. Viola

**Exploring Italy's Present-Day Stress Field Complexity through Utilisation of Geophysical, Geological, and In Situ Drilling Data**

P. Montone, M.T. Mariucci

From field geology to strain and stress inversion: multi-scale variations throughout peninsular Italy

G. Lavecchia, C. Andrenacci, S. Bello, F. Pietrolungo, D. Cirillo, A. Carducci, F. Ferrarini, F. Brozzetti, R. de Nardis

Insights on the seismotectonics of the Alps-Apennines transition zone, NW Italy, after the 2022 earthquake sequence near Genoa

E. Eva, M.G. Malusà, S. Solarino

S2.2**Science and technology to support earthquake prevention and preparedness**

Mauro Dolce (UniNA)
Francesca Pacor (INGV)
Maria Polese (UniNA)

14:00 State of art of the Italian National Seismic Network

L. Chiaraluze, A. Mandiello, M. Massa, D. Piccinini and RSN-BOARD

14:15 MUDA: a new geophysical and geochemical MULTiparametric DATabase for real-time multidisciplinary monitoring networks

Massa M., Rizzo L.A., Ferrari E., Lovati S., Scafidi D. and MUDA working group

14:30 A new service for the exchange of national and transboundary station information: STATION (Seismic sTATION and amplification service)

G. Tarchini, D. Spallarossa, D. Scafidi, S. Parolai, M. Picozzi, D. Bindi

14:45 SDQ: a new tool for the evaluation of seismic-accelerometric data quality

F. Varchetta, M. Massa, R. Puglia, P. Danecek, S. Rao, A. Mandiello, D. Piccinini

15:00 Seismic-induced Landslide Scenarios with Physically-based Models at Regional Scale

N. Monte, P. Reichenbach, L. Disperati, E. D'Addario, M. Alvioli, F. Bucci, M. Santangelo, I. Marchesini

15:15 Towards an earthquake-induced landslide triggering map for Italy

S. Azhideh, S. Barani, G. Ferretti, D. Scafidi, G. Pepe

**S3.2****Near surface geophysics**

Chiara Colombero
Michele Cercato
Emanuele Forte

14:00 A Dynamic and Multi-Source Hydrogeophysical Model to Remediate a Complex Hydrocarbon-Contaminated Site

P. Ciampi, G. Cassiani, G.P. Deidda, C. Esposito, G. Scarascia Mugnozza, M. Petrangeli Papini

14:15 Mixed-dimensional forward-problem solver for the geoelectrical analysis of highly resistive liners in landfills

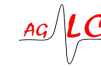
L. Panzeri, A. Fumagalli, L. Longoni, M. Papini, L. Zanzi, D. Arosio

14:30 Quantitative integration of geoelectrical data for mapping of leachate plumes: application to a MSW landfill in Central Italy

D. Melegari, G. De Donno, E. Piegari

**14:45 Denser is better? Spatial sampling vs trace stacking in multichannel GPR data to improve sections and depth-slices readability for archaeological prospections.**

A. Vergnano, C. Comina

**15:00 Non-Destructive Testing for the conservation of a cultural heritage: GPR surveying on masonry walls at the Castellina Museum (Norcia, Italy).**

M. Ercoli, N. Cavalagli, M. Barchi, C. Pauselli, M. Porreca, R. Lupi

15:15 Identification of archaeological features using Machine Learning techniques applied to electromagnetic data

A. Capozzoli, E. Piegari, F. Cella, M. La Manna, V. Paoletti



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| <p>The ‘Many’ Seismogenic Sources of the 1706, Mw=6.8, Maiella Earthquake: New Insights from Source Modelling</p> | <p>15:30 On the reconnaissance of slopes susceptible to co-seismic failures in Daunia (Apulia, Southern Italy)</p> | <p>15:30 Application of conductive textile sachets as electrodes for electrical resistivity tomography measurements collected on debris and coarse-blocky surfaces</p> |
| <p>T. Volatili, V. Gironelli, L. Luzi, P. Galli, M. M. C. Carafa, E. Tondi</p> | <p>F. Fredella, V. Del Gaudio, N. Venisti, J. Wasowski</p> | <p>M. Pavoni, J. Boaga, A. Bast, Lichtenegger, J. Buckel</p> |
|  | |  |
| <p>Three-dimensional magnetotelluric inversion applied in a sector of the Irpinia Fault System (Southern Apennine)</p> | <p>15:45 Regional scale geological/geotechnical parametrization for seismic amplification abacuses – a global approach in the Piedmont Region</p> | <p>15:45</p> |
| <p>M. Balasco, M. De Girolamo, D. Di Gennaro, G. Romano, A. Siniscalchi</p> | <p>C. Comina, G.M. Adinolfi, A. Berteà, C. Bertok, V. Giraud, P. Pieruccini</p> | |
| <p>POSTER SESSION</p> | <p>16:00 POSTER SESSION</p> | <p>16:00 POSTER SESSION</p> |
| <p>High-resolution seismic depth imaging challenges across the 1980 (Ms 6.9) Southern Italy earthquake fault scarp at</p> | <p>17:00 A dense accelerometric network supporting rapid damage estimation in Veneto</p> | <p>17:00 Integrated GPR and FDEM to detect brines pockets in Continental Antarctica</p> |
| <p>G. Ferrara, P.P. Bruno, L. Improta,</p> | <p>P.L. Bragato, J. Boaga, G. Capotosti, P. Comelli, S. Parolai, G. Rossi, H. Siracusa, P. Ziani, D. Zuliani</p> | <p>I. Santin, E. Forte, M. Guglielmin</p> |
|  | |  |
| <p>A reappraisal of the March 1952 Linera seismic sequence: the case study of the S. Tecla fault (Mt. Etna)</p> | <p>17:15 Towards a multi-risk deterministic scenario in the Mt. Etna area</p> | <p>17:15 Applicability of cheap and lightweight magnetic sensors to geophysical exploration</p> |
| <p>R. Azzaro, M.S. Barbano, D. Musumeci, G. Orefice</p> | <p>V. Pessina, F. Meroni, E. Varini, M. Longoni, R. Rotondi, A. Cappello, Panacea Group</p> | <p>F. Accomando, G. Florio</p> |
| <p>Single-station ambient noise measurements to detect faults below the ground surface in the Fucino basin</p> | <p>17:30 Software applications for multi-level safety management of healthcare facilities network</p> | <p>17:30</p> |
| <p>D. Famiani, F. Cara, G. Di Giulio, M. Vassallo, G. Milana</p> | <p>A. Sandoli, D. Gargaro, D. Gentile, M.A. Notarangelo, G. Fabbrocino</p> | |
| <p>Multiscale geophysical investigation on the Budoia-Aviano thrust system (NE Italy): first results</p> | <p>17:45 Site-dependency of fragility functions</p> | <p>17:45</p> |
| <p>E. Rizzo, V. Giampaolo, F. Mucchi, P. Boldrin, G. De Martino, M.E. Poli, G. Patricelli, A. Marchesini, R. Caputo</p> | <p>M. Fasan, C. Bedon, F. Romanelli</p> | |
| <p>New palaeoseismological evidence of coseismic surface rupture across the Carnic Prealpine front (NE-Italy): the Budoia-Aviano thrust system</p> | <p>18:00 Seismic vulnerability of masonry buildings in Montenegro: a heuristic model</p> | <p>18:00</p> |
| <p>M.E. Poli, G. Patricelli, E. Falcucci, S. Gori, G. Paiero, E. Rizzo, A. Marchesini, R. Caputo</p> | <p>F. Aloschi, M. Polese, J. Pejovic, N. Serdar</p> |  |
| <p>New insights into the seismogenic potential of a low-strain rate region: active faulting in the Siena basin (Cava Capanni quarry, Tuscany)</p> | <p>18:15 Seismic isolation for Glass Curtain Walls</p> | <p>18:15</p> |
| <p>A. Brogi, P. Vannoli, M. Zucchi, P. Burrato, U. Fracassi, G. Valensise, H.M. Hu, C.C. Shen</p> | <p>N. Cella, C. Bedon</p> |  |

18:30 **In-plane strengthening of timber floors to improve the seismic response of masonry structures: a 18th century case-study** 18:30
A. Mazelli, C. Bedon, A. Morassi

DISCUSSION

18:45

DISCUSSION

18:45

ROOM A1 - February 16

S1.1 - Recent advances in the study of

Paolo Galli (DPC)
Massimo Cocco (INGV)
Luisa Valoroso (INGV)

Active Transpressive Faulting Along the High Atlas Mountains: the 8 September 2023, Mw 6.8, Morocco Earthquakes

D. Cheloni, N. A. Famiglietti, R. Caputo, C. Tolomei, A. Vicari

What about the predecessors of the February 2023 earthquakes in Eastern Anatolia?

V. Castelli, K. Sesetyan, A.A. Gomez Capera, C. Meletti, M. Stucchi

The Preparatory Process of the 2023 Mw 7.8 Türkiye Earthquake

M. Picozzi, A.G. Iaccarino, D. Spallarossa

Geodetic Modelling of the 2023 Mw 7.8 and 7.6 Türkiye Earthquake Sequence

D. Cheloni, N. A. Famiglietti, A. Akinci, R. Caputo, A. Vicari

Geological field survey in the area affected by the 2023 devastating earthquake sequence (Turkey). Part I: the Hahramanmaraş-Pazarçık fault secchino

S. Pucci, M. Caciagli, R. Azzaro, P. Di Manna, A.M. Blumetti, V. Poggi, P.M. De Martini, R. Civico, R. Nappi, E. Ünsal, O. Tatar

Interplay Between Fault Ruptures and Man-Made Structures Related With the 2023 Mw 7.8 and 7.5 Turkey Earthquakes

T. Volatili, A. Dall'Asta, S. Mazzoli, F. Micozzi, F. Stimilli, G. Valentini, M. Tümay, B. Aksay, A. Beycioğlu, E. Tondi

ROOM A2 - February 16

S2.2 - Science and technology to

Mauro Dolce (UniNA)
Francesca Pacor (INGV)
Maria Polese (UniNA)

09:00

09:15

09:30

09:45

10:00

10:15

3D Deterministic Ground Motion Simulations for the M_≥6.0 Earthquakes in the 2016 Central Italy Sequence

A. Akinci, A. Pitarka, P. De Gori, P. A. Harris and M. Buttinelli

Development of a hybrid method for ground shaking map reconstruction in near-real time

S. F. Fornasari, V. Pazzi, G. Costa



Correlation between site effects proxies: the case of Argostoli basin (Greece)

D. Attolico, G. Cultrera, V. De Rubeis, N. Theodoulidis

Capturing spatial variability of empirical site amplification functions δS_{2S}: a case-study in Central Italy

S. Sgobba, C. Felicetta, G. Lanzano, F. Pacor, T. Bortolotti, A. Menafoglio

One-dimensional numerical approach VERSUS experimental quantifications of site effect parameters: the Ferrara test area

C. Barnaba, L. Minarelli, G. Di Giulio, G. Laurenzano, A. Affatato, P. Taverna, M. Vassallo, R. Caputo, G. Cultrera

ROOM A3 - February 16

S3.1 - Energy transition and resources

Michela Giustiniani
Paolo Mazzucchelli
Vincenzo Lipari

09:00

09:15

09:30

09:45

10:00

10:15

Time-lapse Gravity Monitoring at surface and Excess Mass Estimation of CO₂ Stored in Deep Saline Aquifers

M. Milano, M. Fedi

Machine learning classification of seismic tremor associated with the Mefite d'Ansanto CO₂ gas emission.

S. Panebianco, C. Satriano, G. Vivone, M. Picozzi, A. Strollo, T. Stabile



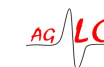
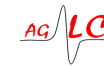
Sustainable geothermal energy for two Southern Italy regions: geophysical resource evaluation and public awareness

O. Amoroso, V. Giampaolo, M. Balasco, M. Blasone, D. Bubbico, P. Capuano, G. De Martino, M. V. Gargiulo, F. Napolitano, A. Perrone, S., Panebianco, R. Russo, V. Serlenga, T. A. Stabile

SpiderTherm: Optimizing Geothermal Extraction for Sustainable Energy Transition

A. Molossi, G. Gola, A. Manzella, M. Pipan

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|---|---|-------|---|
| «Se dice etiam per terremoti esser sommerso et ruinato tre terre» (How a large historical earthquake was born). V. Castelli | 10:30 Site Response Analysis in the Agri valley (Basilicata) using the Generalized Inversion Technique N. Tragni, G. Laurenzano, P. Klin, TA Stabile, MR Gallipoli | 10:30 | TECHNICAL BREAK |
| The harsh life of an earthquake in the region that doesn't exist S. Baranello, R. Camassi, V. Castelli | 10:45 A geological geophysical approach for the large-scale evaluation of seismic amplification in the plain area: example of the Brescia basin (Pianura Padana) G. Caielli, R. de Franco, I. Gaudiosi, A. Mendicelli, M. Moscatelli, G. Norini, D. Rusconi, M. Simionato | 10:45 | InGEO: Innovation in geothermal resources and reserves potential assessment A. Manzella, G.Gola, M. Tesauro, A. Galgaro |
| Synthesis of written, architecture, and geology information sources improving the understanding of seismic sequences in the Ferrara area M. Stefani | 11:00 Local seismic effects forecast supporting risk mitigation in the Ferrara area L. Minarelli, M. Stefani, S. Amoroso, G. Tarabusi | 11:00 | Mapping the thermophysical properties of Apennines rocks (Central Italy): implications for the temperature state of the crust. A. Sabatini, C. Pauselli, S. Fuchs, M. Ercoli, P. Mancinelli |
| The 1783 Calabria earthquake sequence: a review of the coseismic effects on the natural environment C. Zei, C.Ciuccarelli, M.G. Bianchi, G. Tarabusi, D. Mariotti | 11:15 Mapping seismostratigraphical amplification effects at regional scale from geological data N. Carfagna, P. Pieruccini, P. Fantozzi, D. Albarello | 11:15 | Salt domes modelling through magnetic data: an unconventional tool for challenging scenarios L. Bianco, M. Abbas, L. Speranza, B. Garcea, M. Fedi |
| A "new" Aeolian event in 20th century: the 19th June 1916 earthquake in Filicudi Island. C.H. Caracciolo | 11:30 Automated Stratigraphic Reconstruction and Spatialization for Seismic Site Effect Analysis A. D'Agostino, A. Porchia, G. Cavuoto, F. Pavano, M. Moscatelli, G. Tortorici, S. Catalano | 11:30 | Probabilistic Petrophysical Inversion of Ground-Based FDEM Data for Alpine Peatland Characterization: A Case Study in the Italian Dolomites N. Zaru, S. Silvestri, M. Assiri, P. Bai, T.M. Hansen, G. Vignoli |
| Early results of a systematic revision of Ferrarese seismicity of the 13th-15th centuries. A. Faoro, R. Camassi, V. Castelli | 11:45 Stochastic modelling as a method for providing seismic hazard estimates of site effects over wide areas I. Gaudiosi, G. Acunzo, D. Albarello, M. Moscatelli | 11:45 | Airborne and Ground IP: an integrated approach for exploration F. Dauti, A. Viezzoli, G. Fiandaca |
| SUPERSTUDIES: an approach for integrating macroseismic datasets of different nature A. Tertulliani, A. Antonucci, F. Bernardini, V. Castelli, E. Ercolani, L. Graziani, A. Maramai, M. Orlando, A. Rossi, T. Tuvè | 12:00 A systematic analysis at stations of the Italian seismic network to test the role of local topographic effect M. Ariano, P.L. Fantozzi, D. Albarello | 12:00 | Electromagnetic Induction Data Inversion: Realistic Prior Models and Spatial Regularization with Respect to Known Structures N. Zaru, M. Rossi, G. Vacca, G. Vignoli |
| Was the August 26, 1806 earthquake really the largest event in the Roman area ? A. Tertulliani, C. Castellano | 12:15 Mapping recent flood covers using machine learning techniques A. Mendicelli, F. Mori, C. Varone, M. Simionato, M. Moscatelli | 12:15 | Monitoring and No-Money-toring of Oil and Gas exploitation in Italy T. Braun, S. Danesi |
| One Earthquake, Two Scenarios: The Baffling Case of the 1467 Siena Earthquake. A. Arrighetti, B. Gelli, V. Castelli | 12:30 Machine Learning-based modelling for Near Real-Time prediction of liquefaction C. Varone, F. Mori, A. Mendicelli, G. Ciotoli, G. Acunzo, G. Naso, M. Moscatelli | 12:30 | Comparison and calibration of Traffic Light Protocols applied in different countries, in the framework of the ENSURE-project T. Braun, S. Danesi |
| DISCUSSION | 12:45 DISCUSSION | 12:45 | DISCUSSION |



POSTER Session S1.1

Recent advances in the study of earthquakes, faults and seismogenic processes in natural and experimental faults

Focus on the seismic behavior of the Morrone Fault: the Majella-Morrone experiment

M. Anselmi, S. Bagh, C. Chiarabba, P. De Gori, R. Fonzetti, A. Govoni, I. Menichelli, G. Pezzo, G. Saccorotti, F. Silverii

Estimate of seismic fracture surface energy from pseudotachylyte-bearing faults

S. Aldrighetti, G. Di Toro, G. Pennacchioni

Fluid-rock interaction in eclogite-facies meta-peridotite (Erro-Tobbio Unit, Ligurian Alps)

S. Cacciari, G. Pennacchioni, M. Scambelluri, E. Cannaò, G. Toffol

Calibration of the local magnitude scale (M_L) for eastern Cuba

E. Diez, D. Sandron, M. Cutie, M. Guidarelli

Source parameter estimation by using Q tomography: the potentiality of exploiting large sequence of aftershocks

P. De Gori, F. P. Lucente, C. Chiarabba

POSTER Session S1.2

Volcanoes and geothermal fields

Multiscale Analysis of Physical Rock Properties at Stromboli Volcano: What controls the frictional properties?

S.C. Vinciguerra, T. Alcock, P.B. Benson

AI-based emulators for data driven CFD model reconstruction

V. Zago, E. Amato, C. Del Negro

PROMUD Project – multidisciplinary monitoring of Mud Volcanoes

P. Cusano, P. Madonia, F. D'Ajello Caracciolo, C. Felli, F. Grassa, I. Nicolosi, A. Pesci, S. Petrosino, A. Sciarra, I. Aquino, V. Augusti, E. Bellucci Sessa, P. Bonfanti, G. Capasso, T. Caputo, A. Caracausi, C. Caraccilo, R. Carluccio, A. Cascella, A. Costanza, G. Etiopie, E. Ferrari, G. Fertitta, A. La Spina, F. Loddo, M. Massa, L. Minelli, V. Misiti, L. Napoli, F. Pisciotta, C. Ricco, L. Spampinato, G. Tamburello, A. Venuti, D. Albarello, A. Ambrosone, G. Ciotoli, N. De Tommasi, C. Di Maggio, M. Falanga, S. Mancini, A. Mazzini, A. Piombo, A. Rizzo, G. Teza

Geodetic imaging of magma ascent through a bent and twisted dike during the Tajogaite eruption of 2021 (La Palma, Canary Islands)

M. Przeor, R. Castaldo, L. D'Auria, A. Pepe, S. Pepe, T. Sagiya, G. Solaro, P. Tizzani, J. B. Martinez, N. Perez

The magma chamber before the 79 CE Plinian eruption of Vesuvius

D.M. Doronzo, E. Trasatti, I. Arienzo, H. Balcone-Boissard, D. Barra, G. Aiello, V. Amato, M.A. Di Vito

POSTER Session S2.3

Risk Communication

Real-time seismicity on your smartphone

M. Pignone, E. Casarotti, V. Lauciani, C. Nostro, C. Meletti, A. Amato

POSTER Session S2.2

Science and technology to support earthquake prevention and preparedness

GIS spatial modelling for seismic exposure assessment: a case study over Central Asia

A. Tamaro, C. Scaini

Testing synthetic site amplification maps through comparison with empirical estimates in Central Italy

S. Hailemikael, G. Cultrera, C. Barnaba, G. Laurenzano, G. Martini, A. Peloso, F. Cara, G. Di Giulio, D. Famiani

Using data from CRISP database to infer site response behaviour

G. Cultrera, A. Mercuri

ML vs semi-automatic seismic catalogues: the L'Aquila 2009 earthquake sequence example

R. Fonzetti, L. Valoroso, A. Govoni, P. De Gori, C. Chiarabba

Do parallel active fault systems dream of Coulomb stress transfer?

A. Galderisi, P. Galli, Peronace

Multidisciplinary analysis of 3D seismotectonic modelling: a case study of Serre and Cittanova faults in Southern Calabrian Arc (Italy).

S. Giuffrida, F. Brighenti, F. Cannavò, F. Camemolla, G. De Guidi, G. Barrea, S. Gambino, G. Barberi, L. Scarfi, C. Monaco



Integration of 3D P and S velocity model in SeisComP real time monitoring: an application in Northern Italy

F. Grigoli, C. Rossi, C. Cocorullo

Detection capability of earthquakes by a hydraulic pressure device in the Gran Sasso aquifer (central Italy)

D. Isaya, G. De Luca, M. Tallini

Recalibration of the intensity prediction equation in Italy using the Macroseismic Dataset DBMI15 V2.0

B. Lolli, P. Gasperini, G. Vannucci

Offshore fault geometry revealed from earthquake locations using new state-of-art techniques: the case of the 2022 Adriatic Sea earthquake sequence

Like An, Francesco Grigoli, Bogdan Enescu, Mauro Buttinelli, Mario Anselmi, Irene Molinari, and Yoshihiro Ito

The implementation of the paleoseismological sites database into ITHACA Catalogue in the framework of the GeoScienceIR project

D. Maceroni, A.M. Blumetti, L. Bonadeo, M.P. Congi, V. Comerci, P. Di Manna, L. Guerrieri

Seismic monitoring of gas emissions at mud volcanoes: the case of Nirano (northern Italy)

N. Carfagna, A. Brindisi, E. Paolucci, D. Albarello

Magnetic Anomaly Survey of the Martignano Lake maar center, Sabatini Volcanic District, Central Italy.

I. Nicolosi, F. D'Ajello Caracciolo, G. Sottili, N. Ricchetti, R. Carluccio

ACU – Sviluppo di una rete prototipale per lo studio delle emissioni acustiche associate ai micro-processi dislocativi

C. Bidini, D. Sabatini, A. Govoni, G. Romeo, D. Famiani 4, G. Di Stefano, G. Spinelli, G. De Luca, M. Anselmi, A. Frepoli, A. Gattuso, T. Braun

Statistical analysis of the seismicity of the last 30 years at Mt. Somma-Vesuvius.

G. Dalla Via, P. Ricciolino, D. Lo Bascio, A. Tramelli

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Physical models for the Solid Earth and integration between modeling and data of different nature

Diffusivity analysis of clustered seismicity in Central-Southern Apennines.

G.M. Cipressi, A. Vuan, M.A. Romano, G. Lavecchia, R. de Nardis

PRIN 2020 NASA4SHA Project: A Combined Regional Velocity Field of Northern Italy

A. Galvani, M. Albano, C. Braitenberg, F. Brighenti, R. Caputo, F. Camemolla, D. Cheloni, G. De Guidi, R. Devoti, A. Magrin, A. Pellegrinelli, G. Pietrantonio, G. Rossi, S. Stramondo, L. Tunini, D. Zuliani

SISMIKO: the operational task force for seismic networks rapid deployments and integration in the INGV monitoring system.

D. Piccinini, E. D'Alema, S. Marzorati, M. Moretti, L. Margheriti, SISMIKO Group

Temporal and Spatial Variability of Anelastic Attenuation and Its Effects on Ground Motion Characteristics in Central Italy

S. Gabrielli, A. Akinici, C. Gutierrez, J. Ojeda, S. Arriola, S. Ruiz

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Energy transition and resources

ISTRICI – structural inversion of common image gathers

U. Tinivella, M. Giustiniani

Methane recovery and carbon dioxide disposal in natural gas hydrate reservoirs

U. Tinivella, S. Cannone, B. Castellani, M. Ciulla, P. Di Profio, A. Nicolini, M. Filipponi, R. Fazioli, A. M. Gambelli, R. Giovannetti, M. Giustiniani, A. Lanzini, L. Mascali, G. Minelli, A. Rossi, M. Santarelli, D. Schiera, F. Trippetta, M. Zannotti, F. Rossi

UAS photogrammetry analysis for coastal hazard assessment: the case study of Maronti landslide (Ischia, 2022)

N.A. Famiglietti, A. Memmolo, P. Miele, E. Marotta, P. Belviso, G. Avvisati, C. Grasso, R. Moschillo, A. Vicari

The European project SUCCEED for coupling Geothermal Energy and CCUS: innovative monitoring technologies by active-source seismic data acquisition

C. Bellezza, E. Barison, F. Poletto, A. Schleifer, F. Meneghini, G. Böhm, B. Farina

Density values in the shallow crust: analysis and comparison of deep well data in the Adriatic region (Italy)

M.T. Mariucci, P. Montone, P. Balossino

ML-based workflow for earthquake detection and location; preliminary results from the northern Apennines with a model trained on local waveforms

G. Poggiali, S. Bagh, L. Chiaraluca, C. J. Marone, Z. E. Ross, E. Tinti, W. Zhu

Source parameters of the 2010-2014 Pollino (Italy) seismic sequence and their relationship with structural and geological setting of the area

C. Ponte, G. Calderoni, R. Di Giovambattista, M. La Rocca

Rheological behaviour along the Hellenic Wadati-Benioff zone

D. Russo, R. Caputo

A preliminary computation of the seismic coupling for Italy

F. Sparacino, B. G. Galuzzi, M. Palano

Comparing Machine Learning to Manual Earthquake Location procedures: evaluating the performance of LOC-FLOW on a microseismic sequence occurred in Collalto area (NE Italy)

M. Sugan, L. Peruzza, M.A. Romano, M. Guidarelli, L. Moratto, D.

Recent activity of the Stradella fault (Emilia Arc, northern Italy) by a multi-scale approach

A. Tibaldi, R. de Nardis, P. Torrese, S. Bressan, M. Pedicini, D. Talone, F. L. Bonali, N. Corti, E. Russo, G. Lavecchia

Integrated analysis of geophysical data: a case study from Central Italy

M.M. Tiberti, F.E. Maesano, M. Buttinelli, P. De Gori, F. Ferri, L. Minelli, M. Di Nezza, C. D'Ambrogi

On-fault earthquake energy density partitioning from an exhumed seismic mid-crustal fault

G. Toffol, G. Pennacchioni, L. Menegon, D. Wallis, M. Faccenda, A. Camacho, M. Bestmann

MCMTpy waveform inversion package: testing a new method for moment tensor estimation

T. Mancuso, C. Totaro, B. Orecchio

Upper Mantle structure below the Western Alps from P and S receiver functions

S. Monna, C. Montuori, F. Frugoni, C. Piromallo, L. Vinnik and AlpArray Working Group

Upper Mantle structure in the Tyrrhenian and Ionian basins (Central Mediterranean) from P and S receiver functions

C. Montuori, S. Monna, F. Frugoni, C. Piromallo, M. De Caro, A. Giuntini, G. Marinaro, V. Cormier, L. Vinnik

Moment tensor inversion of the 1947 Squillace Basin earthquake (Southern Italy) using digitized analog seismograms

S. Scolaro, J. Batlló, B. Orecchio, D. Presti, D. Stich, C. Totaro

Twenty years of geodetic monitoring in NE-Italy

L. Tunini, A. Magrin, D. Zuliani, G. Rossi

POSTER Session S2.1

Towards new approaches to estimate earthquake and tsunami hazard: a

Radon observations during the November 14 Montelparo, M=4, and December 6 Alleron, M=3.6, earthquakes in 2023

G. De Antoni, C. Fidani, M. Siciliani, T. Milan

Seismic attribute analyses for geothermal applications: a case study from the geothermal potential assessment in the Valle Latina area (Central Italy)

G. Vico, R. Maffucci, S. Bigi

The MARE (MARine Energy) project Assessment of energy production potential from marine waves and currents; a case study from Aegadian archipelago

A.D'Alessandro, A.Sulli, M.Agate, P.Capizzi, C.Caruso, L.Cocchi, R.D'Anna, A.Di Benedetto, A.Figlioli, M.Gasparo Morticelli, A.Mandiello, R.Martorana, A.Pisciotta, S.Speciale, S.Sciré Scappuzzo, S.Scudero, G.Vitale

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Near surface geophysics

What does the seismic record of a World War II bomb-explosion look like? observations from a controlled detonation in 26 november 2023 near Ferrara, Italy

F. Brighenti, A. Garcia, R. Caputo

GPR investigations in the Santa Maria di Vezzolano rectory (AT)

M.F. Alberghina, V. Barberis, P. Capizzi, G. Comello, G. Milazzo,

Geophysical-based approach for studying the submarine groundwater discharge: the SUBGEO project

G. Romano, L. Capozzoli, V. Lapenna, M. Polemio

A novel approach for the assessment of the deterioration of RC structures by means of non-invasive tests supported by numerical models

L. Capozzoli, G. De Martino, S. Imperatore, F. Nerilli, L. Telesca, E. Vasanelli

Detecting fault geometries through electrical methods along some active faults of Mount Etna

F. D'Ajello Caracciolo, I. Nicolosi, V. Sapia, V. Materni, G. Tusa, M. Paratore, R. Azzaro

Investigating the Influence of Coulomb Stress Transfer in the Activity of the Central Apennine Fault System (CAFS) Over the Last Millennium

G. Valentini., T. Volatili, P. Galli, E. Tondi

Microseismicity and infrasonic monitoring at the Mefite d'Ansanto deep-CO2-rich gas emission site (Southern

L. Valoroso S. Cianetti, C. Giunchi, L. Improta, D. Piccinini, L. Zuccarello, F. Di Luccio

The role of long-range correlations and memory in earthquake occurrence

D. Zaccagnino, L. Telesca, C. Doglioni

Revealing anomalies in the Molise 2018 earthquake sequence

S. Gentili, P. Brondi, G. Rossi, M. Sukan, G. Petrillo, J. Zhuang, S. Campanella

Possible applications of self-similarity in earthquake clustering to seismic hazard

D. Zaccagnino, L. Telesca, C. Doglioni

Comparing various seismic equipment for H/V and dispersion measurements in three sites near Ferrara (Po Plain, Italy)

G Di Giulio, L Minarelli, G Milana, M Vassallo, G Tarabusi, M Stefani

The audio and electrical monitoring of the Mefite area in ELF band

G. Cianchini, C. Fidani, A. Piscini, M. Soldani, A De Santis, L. Perrone, M. Orlando, D. Sabbagh

Seismic noise surveys in the area of Etna volcano (southern Italy)

S. Hailemikael, D. Famiani, G. Milana, G. Tusa, M. Paratore, G. Brunelli, R. Azzaro

Geophysical surveys to detect buried archaeological remains in an area near the Dioscuri Temple (Valley of Temples, Agrigento, Italy)

S. Imposa, S. Grassi, G. Morreale, C. Pirrotta, L. Cavalier, A.

In situ geophysical techniques for the hydrogeological hazard assessment in urban area: the Gorgoglione (Basilicata region, Southern Italy) case study

A. Perrone, J. Bellanova, G. Calamita, F. Falabella, M.R. Gallipoli,

Seafloor morphology and very shallow stratigraphic information from acoustic data processing

C. Sauli and L. Baradello

Imaging the buried Mirandola and Casaglia anticlines in the Po Plain, northern Italy, based on HVSR frequencies and amplitudes analysis

G. Tarabusi, G. Sgattoni, R. Caputo
