Detailed Program of oral presentations and posters (last update January 29)

ROOM A - February 11

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

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

Cenozoic dynamics and anorogenic volcanism of the Central Mediterranean: insights from geodynamic modelling **14:00**

J. Yang, M. Faccenda, S. Conticelli

Investigating the effects of a laterally varying surface temperature on calculated rheology **14:15**

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

Thermo-mechanical effects of microcontinent subduction **14:30**

A. Regorda, M. Roda

3D modelling of intermontane basins development: a case study of Agri Valley (southern Italy) **14:45**

A. Lavecchia, M. Filippucci, T. Stabile , G. Prosser , A. Tallarico

Dynamics and Structure of the Adria subduction zone: Insights from Seismic Imaging and Analog Modeling **15:00**

I. Menichelli, I. Molinari, C. Piromallo, F. Funiciello, C. Chiarabba

Oceanic geodiversity along back-arc spreading centers reveals analogies with mid-ocean ridges **15:15**

C. Palmiotto, F. Muccini, E. Ficini, M.F. Loreto, M. Cuffaro

Revisiting Climate Impacts of Catastrophic Volcanic Eruptions Through Satellite Observations: Insights from TOMS to TROPOMI **15:30**

A.B. Malaguti, F. Torrisi, E. Amato, S. Cariello, C. Corradino, G.S. Di Bella, A. La Spina, V. Zago, C. Del Negro

Monitoring slow uplift and subsidence in shallow seafloor environments using bottom pressure measurements **15:45**

R. S. Morelli, R. Riccio, S. Guardato, F. Chierici, S. Caliro, G. Macedonio, G. Iannaccone

ROOM B - February 11

S2.1
Earthquake and tsunami hazard: different return periods, different conceptual schemes and models in a continuum spectrum of time

Daniela Di Bucci (DPC)
Dario Albarello (UniSI)
Bruno Pace (UniCH)

Physics-informed numerical modeling of long-term memory in seismic activity **14:00**

S. Barani, M. Taroni, D. Zaccagnino, G. Petrillo, P. Artale Harris, S. Azhideh

A Comprehensive Approach to Floating Ruptures in Probabilistic Fault Displacement Hazard Assessment: Applications to Hypothetical Case Studies **14:15**

S. Bonini, O. Scotti, A. Valentini, F. Visini, G. Tartaglia, G. Viola, G. Vignaroli

Prototypal Implementation of Probabilistic Fault Displacement Hazard Assessment Using the OpenQuake Engine Components **14:30**

Y. Chen, M. Pagani, H. Fernandez, L. Peruzza

Analysis of GNSS data along the Southern Gas Corridor and estimate of the expected displacement **14:45**

G. Rossi, R. Caputo, D. Zuliani, P. Fabris, M. Maggini, P. Karvelis

Numerical Modelling of Surface Rupture Probabilities on Principal Fault **15:00**

L. Mammarella, F. Visini, P. Boncio, S. Baize, O. Scotti, C. Beauval, B. Pace, S. Thompson

Scientific and ethical issues in creating ground shaking and surface faulting scenarios. Lessons from the planned bridge over the Messina Straits **15:15**

P. Burrato, G. Valensise

DISCUSSION **15:30**

ROOM C - February 11

S3.3
Theoretical and Methodological Development in Applied Geophysics

Andrea Tognarelli (UniPI)
Luca Masnaghetti (SLB)
Gianluca Fiandaca (UniMI)

Optimized Transparent Boundary Conditions for Wave Propagation **14:00**

G. Roncoroni, B. Arntsen, E. Forte, M. Pipan

Denoising Microseismic Distributed Fiber-Optic Sensing (DFOS) data through a Spectral Subtraction-based Approach **14:15**

G.Pascucci, S.Gaviano, F.Grigoli

An automated and data driven framework for refraction statics computation **14:30**

D. Scarpellini, S. Re

Fast gravity processing by linear regression of Free-Air anomalies against topography **14:45**

G. Florio, L. Ricciardi, T. Pivetta

Localized power spectrum of potential field data **15:00**

M.A. Abbas, M. Milano, M. Fedi

A New Bathymetry Model for the Larsen Iceshelf Using Gravity Data **15:15**

M.Maiolino, M. Fedi, G.Florio

Simultaneous estimation of basement depth and density contrast from gravity anomalies via multi-task Deep Learning **15:30**

L. Wang, G. Florio, M. Fedi, C. Messina, S. Xiong and W. Wang

Three-dimensional AEM inversion considering IP effect for mineral exploration **15:45**

J. Chen, B. Zhang, G. Fiandaca

ROOM D- February 11

Investigating regional and local tectonic patterns through boundary analysis techniques: the case study of Campi Flegrei caldera	**16:30**	**Potential tsunami hazard related to offshore activities: case studies in the central Adriatic and southern Sicilian coasts**	**16:30**	**Joint analysis of seismic and electromagnetic data in studying a near-surface offshore section: approaches and examples**	**16:30**
M. Perrini, A. Barone, P. Tizzani, R. Castaldo		C. Angeli, A. Armigliato, M. Zanetti, F. Zaniboni, S. Carcano, M. Forzese, L. Lipparini, I. Molinari.		A. Mirinets, A. Bobachev, S. Mironyuk, M. Aleshin	
Towards autonomous lava flow simulations using the Markov Chain Monte Carlo paradigm	**16:45**	**Submarine landslide-tsunami scenarios in the Gela Basin Margin: numerical simulations and hazard assessment**	**16:45**	**Joint inversion of potential fields data and seismic images**	**16:45**
F. Zuccarello, G. Bilotta, F. Cannavò, A. Cappello, G. Ganci		F. Zaniboni, M. Rovere, A. Argnani, C. Angeli, E. Paolucci, M. Zanetti, A. Armigliato		Bianco L., Fedi M.	
Enhancing GNSS Velocity Estimation in Hydrologically Active Regions	**17:00**	**DISCUSSION**	**17:00**	**Assessment of Minimum Entropy Full Waveform Velocity Analysis**	**17:00**
F. Pintori, A. Borghi, E. Serpelloni				E. Ligas, N. Bienati, M. Pipan	
An automatic waveform modeling method to estimate source and attenuation parameters for earthquakes	**17:15**	**Possible Lithosphere-Atmosphere-Ionosphere Coupling before three earthquake doublets around Arabian Plate**	**17:15**	**Comparison of probabilistic approaches to acoustic FWI in compressed model and data spaces**	**17:15**
R. Petito Penna, A. Zollo, G. Russo, S. Nazeri, G. De Landro		D. Marchetti, E. Ghamry, M. Metwaly		F. Macelloni, S. Berti, M. Aleardi, E. Stucchi	
Vp/Vs Ratio and Crustal Thickness of the Greater Alpine Crust Using H-κ Stacking	**17:30**	**Construction of a Ground Motion Flat File for Subduction Earthquakes in the Mediterranean Area**	**17:30**	**Surface waves full waveform inversion using the Annealed Stein Variational Gradient Descent**	**17:30**
H. B. Roisenberg, L. Boschi, F. Cammarano		B. Shoaib, G. Lanzano, L. Luzi, E. Tondi		S. Berti, M. Aleardi, M. Ravasi, E. Stucchi	
Multi-scale attenuative imaging of the Collalto UGS area and the Montello thrust system (eastern Southern Alps, Italy)	**17:45**	**Seismic Hazard Maps in the Vrancea Zone, Romania, using a 3D Adaptive Smoothing Approach**	**17:45**	**Optimization of rock-physics inversion via FWI and deep learning tools**	**17:45**
D. Talone, M. A. Romano, L. De Siena, M. Guidarelli, M. Santulin, L. Peruzza, G. Lavecchia, R. de Nardis		C. Pandolfi, M. Taroni, A. Akinci		G. Pantaleo, M. Pipan	
Causality in particle bursts and magnetic field (NOAA-SWARM) data possibly related to the Taiwan earthquake, Mw = 7.4, April 3, 2024	**18:00**	**Sensitivity analysis for PFDHA logic trees: do all branches have thorns?**	**18:00**	**A simple theoretical model for electrical conductivity of a weakly anisotropic porous medium with two conducting phases**	**18:00**
D. Marchetti, C. Fidani		M. Colombo, F. Ferrario, F. Livio		H.Yan, C.Comina	
Test for the deployment of a GNSS-R Station in the Trieste Region: Advances in Ocean Tide measurement in the Adriatic	**18:15**	**The role of "equation error" in empirical regressions for seismic magnitude conversions**	**18:15**	**Advances in Quantitative Interpretation: automated seismic reservoir characterization**	**18:15**
A. Fantoni, C. Braitenberg		P. Gasperini, B. Lolli and E. Biondini		A. Murineddu, M. Pezzoli	
High-Precision Geometric Leveling between Udine and Basagliapenta: A Key Method for Detecting Recent Tectonic Deformations at the Eastern Southern Alps Front (NE Italy)	**18:30**	**DISCUSSION**	**18:30**		**18:30**
A. Marchesini, A. Pellegrinelli, G. Patricelli, F. Carnemolla, L. Monti, D. Russo					

ROOM A - February 12

S1.1
Earthquakes, Active Faults and Seismogenic Processes: from Field Surveys to Laboratory Experiments

Paolo Galli (DPC)
Angela Saraò (OGS)
Stefano Solarino (INGV)
Simone Bello (UniCH)

Reassessment of the historical earthquake of 23 February 1887 in Liguria (northwestern Mediterranean) on the basis of magnetogram recordings **09:00**

G. Tarchini, S. Parolai, D. Spallarossa, D. Sandron

Investigating the active Faults affecting Ionians Islands, Western Hellenic Arc **09:15**

M.F. Loreto, V. Ferrante, M. Ligi, F. Muccini, C. Palmiotto, L. Petracchini, S. Romano, A. Ganas, A. Argnani, A. Conti, M. Cuffaro, O. Kei, B. Fabrizio, A. Pensa, S. Kothri, D. Lampridou, I. Merino, R.C. Ranero and P. Nomikou

Morphological mapping of geological risk elements offshore the Ionian Islands (Western Greece) **09:30**

D. Bartolozzi, S. Kothri, P. Nomikou, M.F. Loreto, A. Ganas, V. Ferrante, D. Lampridou, E. Nikoli, C. Ranero

The Contribution of 20 years of deep geoelectrical investigations in the High Agri Valley Basin **09:45**

V. Giampaolo, G. De Martino, L. Capozzoli, F. Olita, G. Prosser, G. Palladino, I. Giano, E. Rizzo

Investigating the Deep Volturno Plain: Structural insights from integration of vintage Seismic, Gravity and Magnetic data **10:00**

P. P. Bruno, M. L. Putignano, F. Cella, G. Florio

Active tectonics and seismicity in the central Adriatic and at the front of the southern Dinarides **10:15**

A. Argnani, G. Dalla Valle

Fault inheritance and the control of large earthquakes and aftershocks **10:30**

R. Fonzetti, M. Buttinelli, L. Valoroso, P. De Gori, C. Chiarabba

DISCUSSION **10:45**

ROOM B - February 12

S2.1
Earthquake and tsunami hazard: different return periods, different conceptual schemes and models in a continuum spectrum of time

Daniela Di Bucci (DPC)
Dario Albarello (UniSI)
Bruno Pace (UniCH)

The impact of 1D seismostratigraphical amplification effects on probabilistic seismic hazard maps at regional scale: the case of Central Italy **09:00**

D. Albarello, N. Carfagna, P. L. Fantozzi

Reconstruction of Subsoil in the Po Plain for a large-scale evaluation of seismic amplification effects **09:15**

G. Caielli, D. Rusconi, R. de Franco, I. Gaudiosi, G. Norini

Large-scale Seismic Site Effect modelling through automated definition of the Stratigraphically Homogeneous Zones: the case of Basilicata Region **09:30**

A. D'Agostino, A. Porchia, I. Gaudiosi, G. Tortorici, S. Catalano

A statistical analysis on soil response at the Italian Seismic Network: the CRISP database **09:45**

A. Mercuri, G. Cultrera

Possible measure of soil factors in the Italian seismic code **10:00**

E. Paolucci, D. Albarello

Empirical estimates of Site Amplification Factors in Italy **10:15**

S. Hailemikael, G. Cultrera, A. Peloso, G. Martini, C. Barnaba, G. Laurenzano, G. Lanzano, S. Sgobba, M.R. Gallipoli, WP6_PRIN-SERENA working group

An updated Vs30 map of Italy integrating topographic and geological proxies with extensive geophysical measurements **10:30**

G. Brunelli, G. Lanzano, L. Luzi, S. Sgobba, E. Thompson, C. B. Worden, D. J. Wald

DISCUSSION **10:45**

ROOM C - February 12

S3.1
Applied geophysics for energy, environment, and new technologies

Vincenzo Lipari (OGS)
Paolo Mazzuchelli (Aresys)
Erika Barison (OGS)

Geophysical Multi-Messanger Approach to Characterizing Geothermal Systems: First Insights from Contursi Terme, Southern Italy **09:00**

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

Joint interpretation of geophysical data for evaluating the geothermal energy potential in the Romagna and Ferrara Folds (Italy) **09:15**

R. Basant, M. Tesauro, V. Cortassa, G. Gola, T. Nanni, A. Galgaro, A. Manzella

Integrated geological modelling for assessing geothermal potential in the Romagna and Ferrara Folds (Italy) **09:30**

V. Cortassa, M. Tesauro, R. Basant, G. Gola, T. Nanni, A. Galgaro, A. Manzella

Subsurface masses monitoring at Theistareykir geothermal field, Iceland, using hybrid gravimetry **09:45**

B. Giuliante, P. Jousset, J. Hinderer, U. Riccardi, T. Pivetta, A. K. Mortensen, P. Weis, C. M. Krawczyk.

GEOTHERMOS: a new Matlab code for geothermal potential assessment **10:00**

G. Gola , M. Cornetto , M. Basant , V. Cortassa , A. Galgaro4, M. Gizzi, T. Nanni , M. Tesauro , F. Vagnon, A. Manzella

Bottom hole temperature correction for geothermal potential assessment: the Eastern Po Plain case study **10:15**

T. Nanni , G. Gola , V. Cortassa , A. Galgaro , M. Tesauro, R. Basant , A. Manzella

DISCUSSION **10:30**

ROOM D - February 12

COFFEE BREAK/POSTER 11:00

An observatory of Italian and European seismicity: the Gazzetta di Parma [1767-1796] in the second half of the 18th century 11:30

S. Baranello

Updating knowledge on 18th century Carnia earthquakes 11:45

M.S. Barbano, S. Baranello, A. Rossetti, V. Castelli, R. Camassi

Improving the quality of the seismic catalogue. Case histories from the Marches (1897-1916-1972) 12:00

V. Castelli, A. Tertulliani, R. Camassi, A. Rossetti

Compilation of macroseismic datasets by integrating multiple earthquake studies 12:15

A. Tertulliani, A. Antonucci, F. Bernardini, V. Castelli, E. Ercolani, L. Graziani, A. Maramai, M. Orlando, A. Rossi, T. Tuvè

Impact of uncertain intensity assessments on the earthquakes' parameters of CPTI15 12:30

A. Antonucci, P. Augliera, M. Locati, A. Rovida

Back-Analysis of the January 2017 earthquake-avalanche cycle in the Central Apennines 12:45

M. Barbolini and P. Gasperini

Lunch 13:00

Hunting for the 1688 Earthquake Seismogenic Fault: Multimethodological Analysis in the Sannio area, Italy 14:00

A. Capozzoli, V. Paoletti, S. Porfido, A.M. Michetti, A. M. Esposito, R. Nappi

Seismic history and active deformation of the frontal Kumaun Himalayan belt: insights from preliminary morphotectonic analysis 14:15

M. Dhali, N. Parrino, A. Ansari, P. Burrato, J. Malik

Geological faults and coseismic ruptures: two sides of the same coin? 14:30

M. F. Ferrario, F. Livio, L. Serva

COFFEE BREAK/POSTER 11:00

Geological and stratigraphic setting of the metropolitan area of Milan (Italy): implications for site-dependent seismic hazard assessment through high-resolution geophysical investigation 11:30

S. Lovati, R. Puglia, S. Maraio, F. E. Maesano, E. Ferrari, G. Brunelli, F. Varchetta, A. Rizzo, F. Villani, M. Massa

NTC18 Standard: Topographical Conditions in the Siena Case Study – Application and Verification 11:45

M.Ariano, P.L.Fantozzi, D.Albarello

Realization of the database of seismostratigraphic features of seismically homogeneous microzones throughout the country 12:00

M. Ariano, P. L. Fantozzi, D. Albarello

1D response analysis of seismic stations in ITACA for Seismic Microzonation purposes 12:15

T. Castelbarco, G. Lanzano, G. Brunelli, S. Sgobba, F. Pacor, L. Luzi, F. Pergalani

A new urban seismic network for the city of Trieste. Where to place it? 12:30

F. Parentelli, C. Beltrame, S. F. Fornasari, V. Pazzi, G. Moschion, G. Costa

DISCUSSION 12:45

Lunch 13:00

Presentation of poster session by the Convenors 14:00

The statistical correlations between the electric oscillations detected by CIEN and moderate seismic activity 14:20

C. Fidani, D. Marcelli

Developing and Evaluating Spatial and Temporal Earthquake Forecast Models: A Methodological Framework and Case Study 14:40

F. Visini, A. Valentini

COFFEE BREAK/POSTER 11:00

High-resolution gravity modelling of Pantelleria Island (Southern Italy) 11:30

L. Ricciardi, G. Florio, S. Carlino, T. Pivetta, U. Riccardi, M. Sposato, L. S. Zampa, G. Ferrara, M. G. Di Giuseppe

Airborne IP driven exploration for greenfield exploration: an application in the Horizon SEMACRET project 11:45

F. Dauti, A. Viezzoli, G. Fiandaca

Multiscale analysis of time lapse gravity data for CO2 mass estimation at the Sleipner storage site 12:00

M. Milano, L. Bianco, M. Fedi

DISCUSSION 12:15 12:30 12:45

Lunch 13:00

S2.3
Risk Communication

Serena Tagliacozzo (IRPPS, CNR)
Valentina Rizzoli (CORIS, UniRoma)

Between acceptance and preparedness: An ex-ante assessment for EEWS 14:00

L. Cugliari, C. Ladina, S. Marzorati, A. Amato, C. Valbonesi, P. Pierleoni

14:15

Enhancing seismic resilience in Italian hospitals: A Web-AR app tool

S. Zidarich, D. Reitano, G. Musacchio, M.G. Sestito, C.R. Addeo, M. Crescimbene, S. Mazza, D. D'Angela, G. Magliulo

14:30

Combining traditional sensors and social media for landslide hazard assessments

R. Franceschini, A. Rosi, M. Del Soldato, F. Catani, N. Casagli

ASSEMBLEA UNIONE GEOFISICA ITALIANA (UGI) (11:30-13:00)

Lunch

ASSEMBLEA SEZIONE ITALIANA EAGE-SEG (14:00-16:00)

New paleoseismic constraints for the Mw ~7, 1857 earthquake in southern Italy.

P. Galli, E. Peronace, S. Bello, F. Brozzetti, A. Galderisi, G. Naso, A. Pignalosa, G. Benedetti, M. Comedini

14:45

Probabilistic Earthquake Forecasting in Italy: Bridging the Gap Between Alarm-Based and Likelihood-Based Models

E. Biondini, B. Lolli, P. Gasperini

Quaternary morpho-sedimentary and tectonic evolution of the Calore River valley (southern Italian Apennines): insights into the potential seismogenic source of the Mw ~7.0, 1456 and 1688

V. Amato, S. Ciarcia, P. Galli, D. Cicchella, A. Galderisi, L. Monaco, G. Fernandez, R. Isaia, S. Nomade, A. Pereira, E. Peronace, B. Giaccio

15:00

The estimation of intensity in large urban areas: the case of the seismic history of Rome

A. Tertulliani, L. Graziani, A. Rossi

15:00

The Instagram channel @INGVterremoti

M. Pignone, C. Meletti, C. Nostro, E. Casarotti, A. Amato, C. Rossi, A. Coppotelli, A. Codeluppi, V. Arena

15:00

Whispers from the Past: Structural-Geochemical Insights into the Silent Mt. Morrone Fault System

S. Bello, P. Galli, M.G. Perna, E. Peronace, P. Messina, G. Rosatelli, C. Andrenacci, G. Lavecchia, F. Pietrolungo, A. Consalvo, V.Mouslopoulou, F. Brozzetti

15:15

An Extended Italian Dataset for the analysis of the Ground Motion-to-Intensity Conversion Equations (GMICEs)

E.Xhafaj, G. Lanzano, S. Sgobba, F. Pacor, A. Gomez-Capera

15:20

DISCUSSION

15:15

Paleoseismic evidence for the Sant'Eufemia-Lamezia 1638 earthquake (Mw 6.7; Calabria, southern Italy)

P. Galli, F. Muto, E. Peronace, G. Naso, P. Vasta

15:30

DISCUSSION

15:30

DISCUSSION

15:45

15:45

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

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

Mauro Dolce (UniNA)
Sara Sgobba (INGV)

Maria Polese (UniNA)

Testing plate-motion steadiness over the earthquake cycle

G. Iaffaldano

16:30

Introduction and mention of the Posters (focus on the Posters related to the themes of the day)

16:30

16:30

CHALLENGE BOWL (16:30-18:45)

Reconciling laboratory, small and large fault frictional properties

D. Zaccagnino, O. Bruno, C. Doglioni

16:45

1D stratigraphic modelling vs experimental seismic amplification: can a possible convergence exist? The case of Val d'Agri

M.R. Gallipoli, G. Calamita, G. Laurenzano, P. Taverna, P. Klin, G. Tortorici, S. Catalano, C. Barnaba

16:45

16:45

Investigating the interseismic coupling degree of the northern Apennines external Arc in Emilia Romagna region, (northern Italy).

S. Giuffrida, L. Anderlini, S. Graham, F. Carnemolla, F. Brighenti, G. de Guidi, F. Cannavò, R. Caputo

17:00

Empirical amplification factors for seismic microzonation studies in volcanic regions: the study case of Mt Etna

G. Laurenzano, C. Barnaba, M. Romanelli, G. Lanzano, G. Brunelli, C. Felicetta, F. Pacor, G. Tusa, R. Azzaro, G. Tarchini, D. Spallarossa

17:00

17:00

Enhanced seismological imaging in the Molise-Sannio region: preliminary results from the MOSAICMO Project D. Latorre, L. Improta, S. Bagh, A. Marchetti, P. De Gori, P. Lucente, G. Riccio, S. Puccillo, R. Cogliano, C. Montuori, S. Monna, L. Valoroso, P. Baccheschi, D. Piccinini	**17:15**	**Comparison between the seismic amplification values obtained from the Italian second-level microzonation (SM2) abacuses and numerical simulation in Friuli Venezia Giulia region** C. Beltrame, P. Taverna, G. Peressi, V. Pazzi, G. Costa	**17:15**	**17:15**
Seismic Coupling Coefficient for China region: preliminary results F. Sparacino, B.G. Galuzzi, M. Palano, R. Azzaro	**17:30**	**Local seismic hazard analysis for the new territorial plan of the Province of Ferrara** G. Carloni, L. Martelli	**17:30**	**17:30**
Identifying seismogenic sources in south-eastern Piedmont by analysing instrumental seismicity recorded over the past 40 years F. Guiñez Rivas, S.C. Vinciguerra, C. Comina, F. Bosco, G.M. Adinolfi	**17:45**	**Physics-based simulation of 3D seismic site effects: Case study of the lower Sarca Valley (Trentino, Italy)** P. Klin, I. Primofiore, L. Zampa, M. Garbin, A. Viganò, C. Barnaba, F. Palmieri, G. Laurenzano	**17:45**	**17:45**
Microseismicity characterization in the normal faulting environment of Southern Apennines using short-term dense monitoring F. Scotto di Uccio, G. Festa, T. Muzellec, P. Martínez-Garzón, M. Picozzi, A. Scala, G. Camanni, G. De Landro, M-A. Meier, G. Beroza, A. Zollo	**18:00**	**Seismic-induced liquefaction hazard along the Emilia-Romagna coast** L. Martelli	**18:00**	**18:00**
Passive seismic survey around the Mefite d'Ansanto deep-CO2 degassing site (Southern Apennines, Italy) L. Valoroso, S. Bagh, S. Cianetti, P. De Gori, L. Improta, D. Piccinini, A. Marchetti and F. Di Luccio.	**18:15**	**Regional scale geophysical parametrization for the seismic amplification abacuses of Piedmont Region** E. Paolucci, G.M. Adinolfi, C. Comina, P. Pieruccini	**18:15**	**18:15**
Seismic noise characterization of the Buddusò – Ala dei Sardi wind park (Sardinia, Italy) and its impact on the Einstein Telescope candidate site G. Diaferia, C. Giunchi, M. Olivieri, I. Molinari, F. Di Felice, A. Contu, D. D'Urso, L. Naticchioni, D. Rozza, J. Harms, A. Cardini, R. De Rosa, M. Di Giovanni, V. Mangano, F. Ricci, L. Trozzo, and C. Murineddu	**18:30**	**DISCUSSION**	**18:30**	**18:30**

ROOM A - February 13

ROOM B - February 13

PNRR EVENT

An outlook on some of the principal projects / partnerships

Giuliana Rossi (OGS), Daniela Di Bucci (DPC)
Angelo Masi (ReLUIS), Massimiliano Moscatelli (CNR)
Claudia Piromallo (INGV), Andrea Tognarelli (EAGE-SEG),Paolo Gasperino (UniBO)

ROOM C - February 13

ROOM D - February 13

	ROOM A	ROOM B	ROOM C	ROOM D
09:00		**GeoSciences IR** **A Research Infrastructure for the Italian Geological Surveys Network** L.Guerrieri		
09:15		**ITINERIS:** **Italian Integrated Environmental Research Infrastructures System** V. Lapenna		
09:30		**MEET:** **Monitoring Earth's Evolution and Tectonics** G. Selvaggi		
09:45		**RETURN:** **Multi-Risk sciEnce for resilienT commUnities undeR a changiNg climate (extended partnership)** D. Calcaterra		
10:00		**ICSC-HPC :** **National Research Centre in High Performance Computing, Big Data and Quantum Computing** E. Casarotti		
10:15		**Space It Up :** **enhancing space technology for space exploration and exploitation for the planet Earth (extended partnership financed by ASI, MUR)** F.Buongiorno		
10:30	**COFFEE BREAK/POSTER**	**COFFEE BREAK/POSTER**	**COFFEE BREAK/POSTER**	**COFFEE BREAK/POSTER**
11:00		**GENERAL ASSEMBLY** With speeches by prof. Nicola Casagli (OGS), dott. Paola Pagliara (DPC) and prof. Maria Cristina Pedicchio (APRE), discussion on the future of research in Italy and Europe after the PNRR, with the same and the representatives of the main projects and extended partnerships presented in the morning; a memory of Giancarlo Monachesi by Viviana Castelli; awarding of the AGLC best paper awards;awarding of the Marco Mucciarelli degree award.		
13:00	***Lunch***	***Lunch***	***Lunch***	***Lunch***

S1.1
Earthquakes, Active Faults and Seismogenic Processes: from Field Surveys to Laboratory Experiments

Paolo Galli (DPC)
Angela Saraò (OGS)
Stefano Solarino (INGV)

Simone Bello (UniCH)

Application of Cluster Analysis to earthquakes originating in Vulcano Island and surrounding areas between 2020 and 2022

H. Langer, G. Barberi, C. Cassisi, O. Cocina, S. Falsaperla, S. Spampinato

14:15 **Optimizing Declustering Parameters for Enhanced Seismic Catalog Analysis: A Comparative Study of Gardner-Knopoff. Gruenthal, and Uhrhammer Models in Southern Italy**

M Guastella, A Figlioli, R Martorana, A Martorana

14:30 **NESTORE algorithm: a machine learning approach for strong aftershock forecasting. Comparison of California, Italy, Western Slovenia, Greece and Japan results; preliminary analysis on new investigated regions**

S. Gentili, P. Brondi, R. Di Giovambattista, G. D. Chiappetta, G. Petrillo, J. Zhuang, L. Caravella, E.-A. Anyfadi, F. Vallianatos

14:45 **Non-linear elasticity, earthquake triggering and seasonal hydrological forcing along the Irpinia fault, Southern Italy**

S. Tarantino, P. Poli, N. D'Agostino, M. Vassallo, G. Ventafridda, G. Festa, A. Zollo

15:00 **Microseismic full moment tensor parameters: case of Mefite d'Ansanto deep-CO2 degassing area (Southern Apennines, Italy)**

P. Roselli, F. Di Luccio, L. Valoroso, S. Bagh

15:15 **Automatic Focal Mechanism Computation for Small-Magnitude Earthquakes in NE Italy**

F. Abdi, A. Saraò, A. Magrin, M. Sugan, G. Messuti, M. Picozzi

15:30 **Moment magnitude (Mw) catalog for seismicity located in Northeastern Italy**

L. Moratto, G. Tarchini, A. Saraò

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

Mauro Dolce (UniNA)
Sara Sgobba (INGV)
Maria Polese (UniNA)

14:00 **Seismic background noise levels in Campi Flegrei Caldera**

R. Esposito, L. Nardone, M. Orazi, D. Galluzzo, A. Benincasa, C. Buonocunto, A. Bobbio, P. Cantiello, A. Caputo, P. Cusano, W. De Cesare, A. Di Filippo, G. Gaudiosi, F. Liguoro, D. Lo Bascio, R. Manzo, C. Martino, R. Peluso, P. Ricciolino, G. Scarpato, M.A. Di Vito

14:15 **Estimation of the site response function for accelerometric stations within Campi Flegrei**

S.F. Fornasari, G. Costa

14:30 **Combined geophysical and geochemical surveys in Norcia intermountain basin (Italy)**

M. Massa, S. Lovati, R. Puglia, E. Ferrari, F. Linsalata, G. Brunelli, A. Figlioli, A. Randazzo, N. Voltattorni, E. Falcucci, S. Gori, M. Pischiutta

14:45 **A Systematic Approach to Investigate Seismogenic Sources of Historical Earthquakes: Preliminary Results from Central Italy**

V. Gironelli, L. Luzi, T. Volatili, E. Tondi

15:00 **Selecting earthquake magnitude and distance for seismic design**

R. Paolucci, A. Chiecchio, M. Vanini

15:15 **Regional-scale physics-based numerical simulations of multiple ground shaking scenarios in the Irpinia region (Southern Italy)**

M. Vanini, R. Paolucci, C. Smerzini, V. Hernandez, I. Mazzieri

15:30 **DISCUSSION and Poster presentation (focus on the Posters relevant to the topics of the day)**

S3.2
Near surface geophysics

Chiara Colombero (PoliTo)
Emanuele Forte (UniTS)
Michele Cercato (UniRoma)

14:00 **Groundwater modelling integration with geophysics**

S. Galli, A. Signora, J. Chen, F. Schaars, M. Groen, G. Sinatra, G. Mainetti, G. Fiandaca

14:15 **Time-Lapse Airborne EM for monitoring the evolution of a saltwater aquifer**

A. Signora, T. Munday, G. Fiandaca

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

14:45 **Development and validation of an SPH model for simulating plastic transport in nearshore zone: A Laboratory – Scale Case Study**

R. Cristofaro, A. Cappello, G. Ganci, C. Iuppa, C. Faraci, G. Bilotta

15:00 **Petrophysically coupling seismic refraction, resistivity and time-domain induced polarization tomographic data for imaging of coastal aquifers**

G. Penta de Peppo, M. Cercato, G. De Donno

15:15 **Seismic reflection study of the evidence and causes of shallow fluid circulation offshore the Balearic Promontory**

V. Lupieri, A. Camerlenghi, A. Del Ben, S. Blondel

15:30 **Surface wave analysis for the mountain permafrost characterization**

I. Barone, A. Bast,, S. J. Gaona Torres, M. Pavoni, J. Boaga

S1.2
The role of geofluids in earthquakes, volcanoes and geothermal fields

Mimmo Palano (UniPa)
Francesca Forni (UniMI)
Luigi Passarelli (INGV-BO)

14:00 **An effusive model for Volcanic eruptions**

C. Godano, M. Semeraro, G. Gonnella, G. Macedonio, F. Oliveri, P. Rogolino, A. Sarracino

14:15 **The first steps towards a preliminary 1D shear-wave velocity model of Pantelleria island**

R. Manzo, R. Esposito, L. Nardone, S. Carannante, E. D'Alema, A. Di Filippo, D. Galluzzo, G. Gaudiosi, F. Liguoro

14:30 **3D Audio-Magnetotelluric Imaging of Pantelleria Island for Geothermal Exploration**

M. Sposato, M.G. Di Giuseppe, R. Isaia, A. Troiano, C. De Paola, R. Di Maio

14:45 **MuRAT3: A new generation of Multi-Resolution Attenuation Tomography**

L De Siena

15:00 **Reprocessing vintage seismic reflection profiles in the offshore Campi Flegrei Caldera**

P.P. Bruno, S. Di Maio, G. Ferrara, S. Vitale, J. Natale, M.A. Di Vito

15:15 **Spatiotemporal Distribution of Seismic Source Energy During the Recent Unrest Phase at Campi Flegrei, Italy**

E. Del Pezzo, F. Bianco

15:30 **May 20, 2024, Md=4.4: The Strongest Campi Flegrei Earthquake ever recorded**

N.A. Pino, S, Danesi, G. Rapagnani, V. De Rubeis, S. Cesca

Spectral inversion for seismic source characterization in Northeastern Italy

L. Cataldi, D. Spallarossa, M. Picozzi, M. D'Amico, P. Morasca, D. Bindi, V. Poggi, G. Costa, A. Viganò

15:45

15:45 **Ambient seismic noise monitoring in permafrost regions: a case study from the Matterhorn Hörnligrat (Valais, Switzerland)**

V. Strallo, C. Colombero, S. Weber

15:45 **Installation, Calibration, and Data Processing of the Superconducting Gravimeter at Rione Terra, Campi Flegrei caldera**

R. Casolaro, U. Riccardi, T. Pivetta, J. Hinderer, F. Littel, A. Fedele, G. Ricciardi, S. Carlino

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

16:00

COFFEE BREAK/POSTER

16:00

A Generalized Inversion Technique for determining Source Parameters in the East Anatolian Fault Zone, Türkiye

L. Colavitti, D. Bindi,G. Tarchini, D. Scafidi, M. Picozzi, D. Spallarossa.

16:30

16:30 **Geological and Historical-Based Approaches to Define Scenario Earthquake in Italy**

S. Sgobba, E. Minotti, M. Freddi, L. Luzi

16:30 **Clustering of combined Resistivity and Seismic measurements as a screening tool for river embankments**

A. Vergnano, D.Chieppa, A. Pasteris, C. Comina, C. Deangeli, L.V. Socco,

16:30 **Evidence of fluid migration from the footwall to the hanging wall during the 2016 Amatrice-Visso-Norcia-Capitignano seismic sequence (Central Apennines, Italy)**

L. Malagnini, D.S. Dreger, F.P. Lucente, I. Munafò

Earthquake magnitude information in the early seconds of DAS recordings

C. Strumia, A. Trabattoni, A. Scala, D. Rivet, G. Festa

16:45

16:45 **Ground Motion Prediction Equations for the Campi Flegrei volcanic area**

A. Scala, C. Strumia, P. Cito, F. Scotto di Uccio, G. Festa, I. Iervolino, A. Zollo, A. Bobbio, V. Convertito, L. Elia, A. Emolo, A.G. Iaccarino

16:45

16:45 **A multiparametric analysis of the recent unrest at Campi Flegrei, Italy**

S. Tarantino, P. Poli, M. Vassallo, N. D'Agostino, Stephane Garambois, Prospero De Martino

Comparison of deep learning and manual seismic arrival picking based on high-precision earthquake locations and tomographic inversions: an example from the Norcia 2016 earthquake

S. Cianetti, A. Lomax, A. Michelini, C. Giunchi

17:00

17:00 **ShakeMap constrained by observed damage**

A. Vitale, A. Rosti, M. Giorgio, I. Iervolino

17:00 **Electric resistivity tomography for identification of local anomalies along embankments: 2D or 3D inversion?**

F. Pace, A. Arato, A. Vergnano, C. Comina, M. Naldi, A. Godio, L.V. Socco

17:00 **Insights into hydrothermal fluid flow dynamics at the Pisciarelli Fumarole Field (Campi Flegrei caldera, Italy) by integrating geophysical imaging and thermo-fluid dynamic numerical modelling**

R. Salone, A. Troiano, M.G. Di Giuseppe, R. Isaia, R. Di Maio

Simulating Broad-Band Ground Motions for M≥6.0 Events in Central Italy using a 1D Frequency-Wavenumber (FK) Approach and Kinematic Rupture Modeling

P. Artale Harris, A. Pitarka, A. Akinci

17:15

17:15 **Integrating CNN and supplemental building information to improve exposure models for regional risk assessments**

O. Ulku, M. Polese

17:15 **TL-ERT and FDEM acquisitions for the monitoring of leeves: test site Tatarena river (Trevi, Italy)**

P. Boldrin, B. Bonaccorsi, A.Benigni, G. De Martino, V. Giampaolo, S. Barbetta, M. Dionigi, G. Bossi, E. Rizzo

17:15 **From subsidence to uplift at Campi Flegrei and coheval deformation at Vesuvio from ERS/ENVISAT SAR data**

A. Amoruso, A. Gualandi, L. Crescentini

Conceptual and numerical analysis of hydrogeological changes in the Sibillini Mts. due to the Mw 6.5 Norcia earthquake

E. Zullo, M. Albano, M. Saroli, M. Moro, G. Testa, N. Bonora, M. Petitta, T. Reimann, C. Doglioni

17:30

17:30 **A rapid seismic classification of historic masonry buildings with risk matrices**

G. Cardani, E. Garavaglia, D. Aita

17:30 **2D FDTD GPR Forward Modelling for Cultural Heritage Preservation: an application on a historical masonry building in a seismogenic area (Norcia, Central Italy)**

G. Alaia, M. Ercoli, N. Cavalagli

17:30 **How the ground deformation drives the earthquake occurrence during the 2005-present time unrest at Campi Flegrei – Italy**

C. Godano, V. Convertito, A. Tramelli e G. Petrillo

Earthquakes and gravity (INVITED)

M. Cocco

17:45

17:45 **Parametric fragility study on a masonry building aggregate prototype within a minor historical area**

R. Di Chicco, A. Formisano

17:45 **Geophysical and Remote Sensing Synergies for Subsurface Mapping in Urban Heritage Sites**

P. Ciampi, L.M. Giannini, S. Younsi, B. Burchini, R. Deiana, G. Cassiani

17:45 **Monitoring of fluids and melt distribution beneath volcanoes: examples from Campi Flegrei and Etna**

G. Giacomuzzi, P. De Gori, N.P. Agostinetti, R. Fonzetti, E. Giampiccolo, C. Chiarabba

18:00 **Observational fragility models for URM buildings based on damage data from 2012 Emilia seismic sequence**

C. Monteferrante, N. Buratti

18:00 **Historical building floor characterization thanks to GPR and LiDAR integration**

V. Pazzi, A. Innocenti, T. Beni, E. Marchetti

18:00 **Seismological analysis of crustal anisotropy variations at Mt. Etna during the 2020-2021 period**

M. Avella, L. Zaccarelli, A. Garcia, O. Cocina, C. Musumeci

Critical Observational Assessment of the Graviquake Hypothesis	**A vulnerability index for ordinary buildings in the Caldera of Campi Flegrei**	**Historical building floor characterization thanks to optimizing survey strategies for full 3D ERT in archaeological prospection: the example of an ancient Roman villa in Augusta Bagien**	**Path duration model for stochastic method of ground motion simulation at Mount Etna volcano**
18:15	**18:15**	**18:15**	**18:15**
L. Malagnini, D. Dreger, T. Parsons, G. Valensise, A. Michelini, G. De Natale	G.Zuccaro, F.L.Perelli, D. De Gregorio	A. Vergnano, A. Merico, C. Comina	S.J. Brooks, G. Tusa
DISCUSSION			
	18:30	**18:30**	**18:30**

ROOM A - February 14

ROOM B - February 14
S2.2 - Science and technology to support earthquake prevention and preparedness

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

09:00 **Quality of life in displaced earthquake survivors**

L. Savadori, D. Di Bucci, M. Dolce, A. Galvagni, A. Patacca, E. Pezzi, G. Scurci, F. Del Missier

09:15 **Methodology proposed for a novel stochastic post-disaster recovery model for healthcare urban networks**

F. Aloschi, A. Miano, F. Parisi, A. Prota

09:30 **The recovery process: from the past Italian earthquakes to a framework for enhancing the preparedness**

M.P. Boni, L. Petrini

09:45 **On the use of physics-based ground motion simulations to generate region-specific seismic damage scenarios**

C. Smerzini, R. Paolucci, M. Vanini

ROOM C - February 14
S3.2 - Near Surface Geophysics

Chiara Colombero (PoliTO)
Emanuele Forte (UniTS)
Michele Cercato (UniRoma)

09:00 **20 years after the SESAME guidelines: should anything be changed?**

S. Castellaro

09:15 **3D Geomodelling of Sulmona basin from geophysical and geological Data**

C. Bondì, R. De Franco, G. Cavinato, A. Bistacchi, M. Romanelli, G. Caielli

09:30 **Local seismic response in intermontane basins with complex geological frameworks: the case study of the Cassino Plain (Italy)**

V. Colagiacomo, M. Albano, M. Saroli,, M. Fiorucci, E. Zullo, M. Moro, F. Doumaz

09:45 **Toward a Comprehensive 3D Subsoil Model of L'Aquila for Integration into Seismic Hazard Models**

I. Garofalo, M. M. C. Carafa, V. Kastelic, P. Monaco, M. Nocentini, M. Tallini

ROOM D - February 14
S1.2 - The role of geofluids in earthquakes, volcanoes and geothermal fields

Mimmo Palano (UniPA)
Francesca Forni (UniMI)
Luigi Passarelli (INGV-BO)

09:00 **Monitoring fumarole emissions on the flanks of mount Etna and correlation with volcanic activity**

F. Sortino, L. Calderone, S. Giammanco, C. Ferlito

09:15 **Stratigraphy and eruptive history of the Pietre Cotte volcanic succession, Vulcano (Italy)**

G. Panelli, M. Roverato, G. De Astis, F. Lucchi, J. Natale, R. Sulpizio, C. Tranne

09:30 **Thermo-fluid dynamic characterization of Vulcano's active geothermal system through the integration of a 3D resistivity model and numerical simulations**

C. Califano, R. Salone, A. Troiano, M. G. Di Giuseppe, R. Isaia, R. Di Maio

09:45 **On the role of fluids in generating seismic activity at Vulcano, Italy, between September 2021 and December 2022**

S. Falsaperla, H. Langer, S. Spampinato, O. Cocina

10:00	**Seismic resilience-based strategies for prioritization of interventions on a subregional area** M. Vona, A. Anelli, T. Tufaro, P. Harabaglia, F. Mori, B. Manganelli	**Variation over time of the elastic parameters of the soil: natural frequencies and stiffnesses** B. Tiboni, S. Castellaro	**Characterization of the shallow hydrothermal system of Vulcano Island (Aeolian Islands, Italy) using geoelectrical survey** A. Mocerino, M. G. Di Giuseppe, R. Isaia, C. De Paola, F. Pagliara, A. Troiano, R. Di Maio
10:15	**Seismic and Geodetic Monitoring of the Federico II school of Engineering Building (Naples, Italy)** G. Capotosti, V. Poggi, D. Zuliani, S. Parolai, A. Compagno, S. Galvi, R. Morga, G. Baltzopoulos, I. Iervolino	**Thermo-mechanical effects on site stability: new insights from passive seismic monitoring (THEROCKLAB Project)** L. Di Toro, C. Colombero, A. Merico, D. Martinelli, C. Francardo, G. Grechi, M. Fiorucci, G. M. Marmoni, S. Martino	**One year of underground CO2 concentration recordings at CIEN station of San Procolo, Fermo** C. Fidani
10:30	**Improving Decentralized On site Earthquake Early Warning system by rapid estimation of interstorey drift** R. Morga, S. Parolai, V. Poggi	**A three-dimensional resistivity approach: the Ca' Lita landslide experiment** A. Bratus, O. Souza Do Araujo, G. Bertolini, N. Bertone, L. Borgatti, E. Forte, M. Giorgi, F. Pellegrini, R. Spagni, R. Zambrini	**Crustal structure beneath Mefite d'Ansanto CO2 emission area (Southern Apennines, Italy) from teleseismic data: first results** S. Morabito, P. Cusano, A. Gervasi, G. Milano
10:45	**Engineering research at Campi Flegrei during bradyseism** P. Cito, R. Baraschino, I. Iervolino	**Landslide detection and monitoring by integrating electrical, seismic and interferometric techniques in a multi-hazard perspective: the case of San Vito Romano (RM)** S. Marano, M. Cercato, G. De Donno, G. Grechi, Y. Hussain, S. Martino, D. Melegari, G. Penta De Peppo , S. Rivellino	**Passive seismic measurements to characterize gas reservoirs in a mud volcano field in Northern Italy** A. Brindisi, E. Paolucci, N. Carfagna, D. Albarello
COFFEE BREAK/POSTER	11:00 **COFFEE BREAK/POSTER**	11:00 **COFFEE BREAK/POSTER**	11:00 **COFFEE BREAK/POSTER**
11:30	**The Crucial Role of the SISMIKO Operational Group in Rapid Response to significant Seismic Events in Italy** M. Pastori, E. D'Alema, M. Moretti, SISMIKO Working Group	**Machine learning-based surface wave dispersion curve inversion** F. Khosro Anjom, C. Colombero	**Continuous multiparametric monitoring of mud volcanoes: the study case of the Salse di Nirano natural reserve (Fiorano Modenese, Italy)** E. Ferrari, G. Capelli Ghioldi, A.L. Rizzo, A. Sciarra, G. Tamburello, S. Lovati, F. Viveiros, M. Massa
11:45	**An integrated multi-risk assessment methodology for seismic-induced landslide impacting aging infrastructures** M. Anghileri, F. Biondini, C. Di Prisco, P. Marveggio, R. Paolucci, L. Petrini, C. Smerzini, M. Vanini, M. Zerbi	**Integrated approach based on geophysical and geotechnical safety factors for stability analysis of partially saturated soil slope** R. Buonaiuto, M. Pirone, R. Salone, G. Urciuoli, R. Di Maio	**Automated Detection of Recent Mud Extrusions Using UAV Imagery and Deep Learning: A Comparative Analysis of Traditional and CNN-Based Approaches** M. Guastella, R. Martorana, A. D'Alessandro, F. Pisciotta
12:00	**Earthquake-triggered Natech risk assessment: an application to industrial practice** A. Chiecchio, P. Poggi, E. Fiorini, M. Cademartori, M. Pontiggia, F. Ovidi, R. Paolucci	**From electrical resistivity to Volumetric Water Content tomographies: how to optimize irrigation in horticulture** A. Innocenti, R. Fanti , V. Pazzi	**Spectral Properties of Fluid-Induced Self-arrested and Run-away Ruptures** F. Mosconi, E. Tinti, M. Supino, A.A. Gabriel, E. Casarotti, M.A. Meier, D. Giardini, M. Cocco
12:15	**A new method for the detection of earthquake-induced landslides from direct and indirect observation** C. Zei, S. Valkaniotis, G. Papathanassiou, M. Taftsoglou, T. Chatzitheodosiou, G. Tarabusi, C. Ciuccarelli, P. Burrato, M. Ghirotti	**Geophysical and geochemical data integration for agricultural soil monitoring and prevention of the effects of salinity, organic matter, and climate change in the Province of Ferrara (Northern Italy)** A. Sobbe, E. Rizzo, G. Bianchini	**Infrasonic sensors as extension of the Italian Seismic Network: The ACU Project (DL50)** T. Braun, A. Govoni, C. Bidini, G. De Luca, G. Di Stefano, G. Spinelli, M. Anselmi, D. Famiani, A. Frepoli, A. Gattuso, D. Sabatini, G. Romeo

12:30	**Dynamic structure-soil interaction characterization of the "Terza Torre" building in Bologna (Italy)** L. Cataldi, V.Poggi, S. Parolai, M. Romanelli, G. Capotosti, C. Scaini, D. Ertuncay, B. Petrovic, L. Tunini, L. Martelli	**12:30**	**Modelling the airborne Induced Polarization effects at continental scale: the Tempest case study in the AusEM project** F. Dauti, A. Viezzoli, G. Fiandaca	**12:30**	**Petrophysical characterization of Adriatic Plate's crustal and mantle rocks** M.C. Lopez, G. Gola, V. Kastelic, D. Di Naccio, A. Zanetti, M.M.C. Carafa, S. Vinciguerra
12:45	**Numerical Seismic Fragility Analysis of Glass Curtain Walls** N. Cella, C. Bedon	**12:45**	**The Reference and Fiducial gravity networks in Italy** R. Barzaghi, G. Berrino, B. Betti, A. Borghi, D. Carbone, D. Carrion, D. Contrafatto, A. Facello, F. Fuso, A. Germak, F. Greco, A.	**12:45**	**Upwelling CO2 at Mount Forcuso antiform (southern Apennines, Italy): impact of hydraulic and thermal features on** E. Vitagliano, L. Pizzino, L. Improta, N. D'Agostino
13.00	**Estimation of the fundamental period of infilled RC framed buildings at different design limit states** N. Lamarucciola, R. Ditommaso, F. C. Ponzo	**13.00**	**Advancing Geophysics with Next-Generation Quantum Gravity Sensors: Innovations from the FIQUgS Project** M. Capponi, D. Sampietro	**13.00**	**Earthquake Patterns and Volcanic Risk: Reykjavik's Four-Year Seismic Analysis** A. Figlioli, R. Martorana , A. D'Alessandro
13:15	**Some remarks on the formulation of fragility functions depending on M-R earthquake couples** A. Sandoli, G. Fabbrocino	**13:15**	**Versatile Magnetic Surveying: Comparing MagNimbus and MagArrow Magnetometer** F. Accomando, A. Barone, F. Mercogliano, A. Vitale , A. Bonfante, M. Buonanno, V. De Novellis, R. Castaldo, G. Solaro, S. Pepe and	**13:15**	**Hydroseismograms from an underground hydrosensitive to seismicity site (Gran Sasso aquifer, central Italy)** V. Guerriero, D. Isaya, G. De Luca, G. Di Carlo, R. Martorana, M. Tallini
13:30	**Implications of Corrosion Modelling Strategies on the Time Dependent Seismic Risk Assessment of RC Bridges Exposed** S. Reale, M. Furinghetti, A. Pavese	**13:30**	**On surveying and modelling the magnetic response of Unexploded Ordnance (UXO)** A. Godio, A. Casas, C. Colombero, J. C. Tapias	**13:30**	**Scattering and absorption imaging of the High Agri valley oil field region (Southern Italy)** F. Napolitano, O. Amoroso, V. Serlenga, T. A. Stabile, S. Panebianco, V. Giampaolo, L. De Siena, P. Capuano
13:45	**DISCUSSION**	**13:45**		**13:45**	

POSTER Session S1.1

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

S1.1-1 Deciphering the 1706 Maiella Earthquake (Mw 6.8): from Seismogenic Sources to Ground Motion Simulations

T. Volatili, V. Gironelli, L. Luzi, P. Galli, M. M. C. Carafa, E. Tondi

S1.1-2 Late Pleistocene-Holocene tectonic activity of the Longhere-Fadalto-Cadola Line in the Lapisina Valley (Vittorio Veneto, NE Italy)

M.E. Poli, G. Patricelli, G. Paiero, A. Francheschet, A. Marchesini, N. Abu Zeid, G. Lucchetta

S1.1-3 Geological data to define the presence of active and capable faults in urbanized areas of the central Apennines

M. Mariani, S. D'Annibale, E. Falcucci, S. Gori, F. Galadini

S1.1-4 An updated 2D-3D geological model of the Molise-Sannio area (Southern Apennines) in the framework of the MOSAICMO project: inferences and hints for the seismotectonics of the Southern Apennines (Italy)

M. Buttinelli, F.E. Maesano, R. Maffucci, G. Vico, L. Improta, M. T. Mariucci, F. Mazzarini, F. Villani, M.M. Tiberti, R. Basili

S1.1-5 Fault Model of the 2024 Mw 7.4 Hualien (eastern Taiwan) Earthquake Sequence from GNSS and InSAR Data

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

S1.1-6 Structural and seismotectonic complexities of the Northern Apennines highlighted by high-quality seismic locations

G. Lelj, D. Latorre, D. Talone, G. Lavecchia, R. de Nardis

S1.1-7 Geophysical and morphotectonic survey for the characterization of active faults in urban areas: the Scandicci Fault (Firenze, Italy)

A. D'Alessandro, L. Piccardi, E. Vittori, V. D'Intinosante, M. Baglione

POSTER Session S2.1

Earthquake and tsunami hazard: different return periods, different conceptual schemes and models in a continuum spectrum of time

S2.1-1 A fault-based approach to model seismicity rates for seismic hazard assessment in the Irpinia region (southern Italy)

G. Alessandrini, O. Gómez-Novell, S. Castellaro

S2.1-2 Questions about correlations between particle precipitation and strong earthquakes

C. Fidani

S2.1-3 Exploring the impact of attenuation variations on ground motion simulations in the Central Apennines

S. Gabrielli, A. Akinci, E. Del Pezzo

S2.1-4 Including sea-level rise and vertical land movements in probabilistic tsunami hazard assessment for the Mediterranean Sea

A. Grezio, M. Anzidei, E. Baglione, B. Brizuela, P. Di Manna, J. Selva, M. Taroni, R. Tonini, A. Vecchio

S2.1-5 Depth-dependent stochastic slip models modulated by stress drop and rigidity variations in subduction zones: application to probabilistic tsunami hazard analysis

K. N. Vishnu, A. Scala, S. Lorito, F. Romano, R. Tonini, H. B. Bayraktar, G. Festa

S2.1-6 Modelling Synthetic Catalogues of Earthquake Ruptures in Complex Interacting fault Systems: A Case study in Central Apennines, Italy.

K Saghatforoush , B Pace, A Verdecchia, F Visini, L Peruzza, O Zielke

S2.1-7 Advancing PSHA in Italy: Exploring Intensity Prediction Models and Soil Amplification Effects

M. Santulin, A.A. Gomez-Capera

POSTER Session S3.1

Energy Transition and Resources

S3.1-1 Preliminary results of the GREEN (Geological stoRagE of hydrogEn and carboN: clean and efficient monitoring methods) project

M. Graziano, P. Mancinelli, S. Satolli, V. Scisciani, A. Siniscalchi, S. Tripaldi

S3.1-2 Thermo-physical data of sedimentary rocks: analysis using Kantorovich-type operators

C. Pauselli, L. Zampogni, L. Gubbiotti

S3.1-3 A gravity survey of Casamicciola fault (Ischia Island)

L. Ricciardi, T. Pivetta, V. Paoletti, S. Carlino, N. A. Pino, U. Riccardi, G. Florio

S3.1-4 The importance of measuring thermal and acoustic properties on rock analogues in geothermal potential assessment studies: the example of Northern Apennines Triassic carbonate platform and underlying basement rocks

P. Slupski, G. Gola, M. Basant, V. Cortassa, M. Facci, T. Nanni, M. Tesauro, A. Manzella, A. Galgaro

POSTER Session S3.2

Near Surface Geophysics

S3.2-1 Testing the Geophysical Instrumentations of the ITINERIS Infrastructures @CNR-IREA for the Investigation of the Soil-Subsoil System

A. Barone, F. Mercogliano, F. Accomando, G. Esposito, A. Vitale, R. Castaldo, G. Gennarelli, V. De Novellis, S. Pepe, G. Solaro, M.

S3.2-3 Submarine Canyons and Mass Transport Deposits in the Cagliari Gulf

M.C. Caradonna, A. Del Ben, V. Frisicchio , R. Geletti, G.A. Pini

S1.1-8 Geodetic Insights into the 2024 Wushi (North-Western China) Seismic Sequence: Mw 7.0 Mainshock and Mw 5.7 Aftershock from InSAR Data

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

S1.1-9 Seismotectonic setting of the eastern margin of Adria plate

R. Cassataro, G. Pezzo, M. Palano, A. Sulli, C. Chiarabba

S1.1-10 Recent seismic activity in Friuli (NE Italy): the M4.6 Socchieve earthquake sequence and its preliminary seismotectonic interpretation

M.A. Romano, P. Brondi, A. Magrin, L. Zampa, M. Guidarelli, M. Sugan, F. Abdi, A. Saraò, D. Spallarossa, M. Picozzi

S1.1-11 A comprehensive seismic catalog of the Montello-Collalto area (Eastern Southern Alps, Italy) for seismotectonic and induced seismicity purposes

G. M. Cipressi, M. A. Romano, P. Bernardi, E. Diez, F. Franceschinel, M. Garbin, M. Guidarelli, P. Klin, G. Laurenzano, L. Moratto, L. Peruzza, F. Pettenati, M. Plasencia, E. Priolo, A. Rebez, M. Romanelli, D. Sandron, M. Santulin, A. Saraò, A. Tamaro, G. Lavecchia, R. de Nardis

S1.1-12 Improvement of the detection of micro-earthquakes in the Val d'Agri region (Southern Italy) by deep learning algorithms

E. Caredda, A. Morelli, M. Errico, G. Zerbinato, M. P. Isken, S. Cesca

S1.1-13 Earthquake Detection and Phase Picking using EQtransformer: a case study on Turkey-Siria earthquake, 6 February 2023

A. Di Benedetto, G. Lo Bosco, A. D'Alessandro

S1.1-14 Tremors—A Software App for the Analysis of the Completeness Magnitude

A. Figlioli, G. Vitale, M. Taroni and A. D'Alessandro

S1.1-15 Quantifying the Impact of Window-Based Declustering Approach on Magnitude of Completeness Estimation

A.Figlioli, M.Guastella,R.Martorana and A.D'Alessandro

S2.1-8 Magnitude-dependent chaos in earthquakes

P. Venegas-Aravena, D. Zaccagnino

S2.1-9 The UV-divergence problem in statistical seismology: insights from an ETAS model with smoothed minimum triggering magnitude

D. Zaccagnino, J. Li, D. Sornette

S2.1-10 Time-dependent PSHA using correlations between electric oscillations detected by CIEN and moderate earthquakes

C. Fidani

POSTER Session S2.2

Science and technology to support earthquake prevention and preparedness

S2.2-1 Seismic characterization and local seismic response analysis in urban areas: a case study of school sites in Palermo

A. Canzoneri , A. Carollo, P. Capizzi , M.V. Majani , M. Guastella , R. Martorana

Rapid generation of report on post-seismic events with gmProcess: a case study for a dense accelerometric network in Veneto (NE Italy)

G. Capotosti, P.L. Bragato, L. Cataldi, P. Comelli, C. Scaini, H. Siracusa, P. Ziani

S2.2-2 Why should we bother about risk reduction at the urban scale? The Early Recovery System (ERS) and a methodology to assess the impact of prevention instruments on post-quake urban functionality

C. Fontana, V. Tomassoni, M. Giuffrè

S2.2-3 Estimation of site response using seismic recordings from surface and borehole sensors

G. Franceschina, A. Tento

S3.2-4 Drone-Based Aeromagnetic Surveys for Mapping and Characterizing Mud Volcanoes

R. Carluccio, F. D'Ajello Caracciolo, L. Minelli , I. Nicolosi

S3.2-5 Geophysical Investigation and Ambient Noise Analysis Around Messina Cathedral (Southern Italy)

S. D'Amico, E. Colica, L. Galone, F. Panzera, D. De Domenico, M. Adam Alddoum Adam, D. Presti, S. Scolaro, C. Totaro

S3.2-6 Ambient Noise Tomography of the Campi Flegrei caldera (Naples, Italy): Preliminary Results

C. Di Dato, A. Tramelli, L. De Siena

S3.2-7 Non-destructive tests for monitoring reinforced concrete structures in laboratory conditions

D. Di Gennaro, G. Salvia, G. De Martino, E. Vasanelli, S. Imperatore, F. Nerilli, L.Capozzoli

S3.2-8 Integration of Remote Sensing and geophysical techniques to study a cultural heritage in a seismic area: Ground Penetrating Radar and Laser Scanner surveys for the conservation of the Castellina Museum at Norcia (central Italy)

M. Ercoli, G. Alaia, R. Brigante, L. Marconi, N. Cavalagli, C. Pauselli, F. Radicioni

S3.2-9 Ground Penetrating Radar Applications in Active Tectonics: Insights from the Southern Apennines (Italy)

N. Gagliarde, N. A. Famiglietti, A. Memmolo, A. Meo, R. Migliazza, P. Miele, A. Vicari, B. Massa

S3.2-10 Geo-hazards evaluation in urban areas: a new ground-airborne instrumental facility for geophysical exploration and land surface monitoring

V. Giampaolo, G. De Martino, V. Serlenga, G. Gangone, L. Martino, G. Calamita, M.R. Gallipoli, I. Gaudiosi, A. Perrone, S. Pignatti, T.A. Stabile, V. Lapenna

S3.2-11 A New multiscale and multisensor strategy for the characterization of groundwater discharge in coastal areas - First results of the SUBGEO project in Pianosa island

R. Giannuzzi, L. Capozzoli, D. Di Gennaro, M. De Girolamo, M. Doveri, M. Menichini, D. Patella, M. Polemio6, A. Santilano, G. Romano

S1.1-16 Full moment tensor inversion of small magnitude earthquakes of the Pollino (Italy) seismic swarm

M. Ponte, S. Cesca, M. La Rocca, P. Büyükakpınar, G. Calderoni

S1.1-17 Evaluating Bayesian approaches for double-couple moment tensor estimation: an Application in Central Italy

T. Mancuso, C. Totaro, B. Orecchio

S1.1-18 Finite source analysis of small earthquakes using the

A. Cuius, C. Satriano, M. Supino, E. Tinti, L. Chiaraluce

S1.1-19 Orientation and Data Quality of Seismometer Arrays in Shallow Boreholes at the Alto Tiberina Near Fault Observatory (TABOO-NFO), Italy

A. Cuius, E. Tinti, M. Supino, S. Marzorati, D. Piccinini, C. Collettini, and L. Chiaraluce

S1.1-20 Quantifying the role of Thermal Insulation in Broad-Band Seismometer Performance: Evidence from Laboratory and Field Tests

R. Pegna, D. Biagini, M. D'Ambrosio, D. Piccinini, G. Saccorotti

S1.1-21 The the Antarctic Seismographic Argentinean Italian Network (ASAIN): status of the network and latest developments

M. P. Plasencia Linares, M. Santulin, A. Magrin, D. Sandron, M. Romanelli, R. Laterza

S1.1-22 INGV GNSS Network (RING) densification: benefits, challenges and techniques

L. Zarrilli, G. Cecere, F. Michiello, R. Moschillo, S. Pucillo, A. Vicari

S2.2-4 Integrating Physics-Based Ground Shaking Simulations into Near Real-Time Earthquake Damage Assessment: The Role of SPEED in the UrgentShake Workflow

I. Monsalvo Franco, C. Smerzini, E. Zuccolo, C. Scaini, V. Poggi

S2.2-5 3D geological model: A key tool for risk assessment in urban areas

R. Novellino R. and P. Vannucchi

S2.2-6 A Comprehensive GIS-Based Solution for Managing

M. Pastori, S. Falcone, R. Moschillo, L. Nardone, M. D'Ambrosio, A. Cavaliere, SISMIKO Working Group

S2.2-7 The OGS MobileLAB for earthquake rapid response

D. Pesaresi, M. Bertoni, P. Comelli, M. Picozzi

S2.2-8 Accuracy of forecasts of seismic damage scenarios in urban areas: the case of L'Aquila 2009

R. Sava, A. Greco, A. Pluchino, A. Rapisarda

S2.2-9 ProbShakemap: a Python toolbox propagating source uncertainty to ground motion prediction

A. Stallone, J. Selva, L. Cordrie, L. Faenza, A. Michelini, V. Lauciani

S2.2-10 Deployment of a temporary seismic network for the study of active faults along the Voltri Massif (Genoa, northwestern Italy)

G. Tarchini, L. Colavitti, D. Scafidi, M. Locatelli, S. Parolai, D. Spallarossa, M. Vassallo, G. Riccio

S2.2-11 STPredict-WP3 Activity: Variability of seismic response in the historic center of Rome. First results from 1D simulations

T. Tufaro, P. Bordoni, F. Di Michele, G. Di Giulio, D. Famiani, F. Marra, M. Vassallo, G. Riccio

S3.2-12 Integration of data from direct and indirect surveys for more accurate localization and characterization of underground cavities in eastern Sicily (Italy)

S. Grassi, G. Morreale, D. Messina,, P. Monforte, G. Giudice, G. Quattrocchi, S. Imposa

S3.2-13 InSAR for the characterization of climate-related processes in Northwest Italy

D. Guidi, F. Silverii, M. Polcari, E. Rivalta

S3.2-14 Evaluating Hydrogeological Risks in Urban and Peri-

L.Martino, G. Calamita, S.Uhlemann, F. Canora, A. Perrone

S3.2-15 Integrated Geophysical Surveys in the Southern Alps (Italy): A Multimethod Approach to Subsurface Characterization

A. Montanaro, M. Taddeo, U. Giordano, G. Esposito, P. Luiso, D. Fiore

S3.2-16 Evaluating seismic site response in presence of a lava tube: Preliminary results

F. Panzera, S. Alparone, A.M. Borzì, D. Contrafatto, E. Colica, S. D'Amico, L. Galone, G. Giudice, G. Grechi, G. Larocca, S. Martino,

S3.2-17 A dense nodal array to study the site effects and structure of the intermontane Bojano basin (Central Italy) – MOSAICMO project

M. Vassallo, G. Di Giulio, G. Riccio, S. Hailemikael, S. Pucillo, R. Cogliano, L. Improta, D. Latorre

S3.2-18 A method for the quantification of errors in the geological models based on back-stripping procedure

E. Vitagliano, I. Spassiani, C. D'Ambrogi, R. Di Maio

POSTER Session S1.2

The role of geofluids in earthquakes, volcanoes and geothermal fields

S1.2-1 Enhancing Seismic Monitoring in Volcanic Regions: Near Real-Time P and S Phase Recognition Using PhaseNet in Campi Flegrei area

P. Cantiello, R. Esposito, A. Di Filippo, R. Peluso

S1.2-2 Characterisation of soil CO2 flux time series using

S. Scudero, A. D'Alessandro, M. Liuzzo

S1.2-3 New insights on the Mount Etna volcano (Southern Italy) from local earthquake tomography

C. Totaro, M. Aloisi, C. Ferlito, B. Orecchio, D. Presti, S. Scolaro

S1.2-4 The lava fountain episodes at the Voragine crater of Mt.

T. Sgroi, S. D'Amico, A. Giuntini, A. Mantovani, G. Marinaro, F.

S1.2-5 Structural analysis of the northern sector of the krafla caldera (iceland) through field and drone survey

L. Suranna, D. Marchetti, M. Pedicini, N. Corti, S. Brando, F. Ferraiuolo, F. Pasquarè Mariotto, A. Tibaldi, F. L. Bonali

S1.2-6 Unexpected tectonically active areas evidenced by geochemical markers in geofluids occurrences of the Mediterranean area

G. Martinelli, G. Facca, F. Gherardi, L. Pierotti, D.L. Pinti, G. Yüce

S1.2-7 Exploring Northern Calabria region through Seismic Attenuation Tomography and Complementary Geophysical Data

M. Adam Alddoum Adam, L. De Siena, D. Presti, S. Scolaro, C. Totaro

S 1.2-8 Salse del Dragone Mud Volcano (Northern Italy): Characterization Through Surface Wave Seismic Prospecting

M. Zanetti, E. Paolucci, M. Antonellini, A. Armigliato, A. Pesci, Zaniboni, A. Piombo

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Risk Communication

S2.3-1 Seismicity map of Italy | 1999-2024

M. Pignone, R. Moschillo, A. Nardi, B. Castello, C. Nostro, L. Margheriti, F. Di Laura, D. Riposati

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Theoretical and Methodological Development in Applied Geophysics

S3.3-1 Coherence-based earthquake location for hybrid fiber optic and seismometer networks: a concept

E. Bozzi, A. Bonelli, G. Pascucci, S. Gaviano, G. Saccorotti, G. M. Bocchini, R. Harrington, A. Ugalde, H. Martins, F. Grigoli

S3.3-2 An inter-disciplinary Virtual Research Environment to

D. Marchetti , D. Bailo , J. Michalek , R. Paciello

S3.3-3 The Seismological Calibration Center of OGS

D. Zuliani, A. Compagno, P. Fabris, E. Del Negro, M. Bertoni, P. Di Bartolomeo, G. Capotosti, G. Rossi, P. Bragato, M. Picozzi, H. Siracusa, P. Ziani, M. Spampani, M. Pedroni, R. Khop, H. Voß

S3.3-4 LZER0: adaptation for temporary monitoring and

D. Zuliani, A. Compagno, P. Fabris, F. De Giorgi, S. Galvi, A. Magrin,

POSTER Session S1.3

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

S1.3-1 Multitemporal, Multisatellite and Multisensor InSAR techniques for Slow-Moving Landslides monitoring

C.A. Brunori

S1.3-2 Integrated 3D crustal model in Southern Italy from geophysical and petrophysical constraints

M. Perrini, F. Accomando, G. De Landro, G. Gola, P. Tizzani, … Carafa, M. Fedi, A. Zollo, V. Kastelic, C. Di Lorenzo, D. Di Naccio, M. Taroni and R. Castaldo

S1.3-3 Environmental monitoring of Etna volcano to detect anomalies related to geophysical activity: first results

M. Soldani, G. Cianchini, A. Bonforte, S.A. Campuzano, R. Catania, S. D'Arcangelo, M. De Caro, A. De Santis, D. Di Mauro, S. Lepidi, S.R. Maugeri, M. Orlando, L. Perrone, D. Sabbagh

S1.3-4 Anisotropic local earthquake P-wave tomography of the Val d'Agri area

G. Del Piccolo, M. Faccenda, A. Morelli, M. Buttinelli, R. Maffucci, M. Ciacagli

S1.3-5 Evidence of Seismic and Ionosphere-Atmosphere-Lithosphere coupling during strong Italian earthquakes

M. Falanga, P. Cusano, G. D'Angelo, E. De Lauro, S. Petrosino, D. Recchiuti and M. Piersanti

S1.3-6 Finite element models of spontaneous subduction initiation: preliminary results

V.Fedeli

S1.3-7 Moho and Lithosphere-Asthenosphere Boundary (LAB) below the Sannio-Matese region (Central-Southern Apennine) from P and S receiver functions

S. Monna, C. Montuori, L. Improta, D. Latorre

S.13-8 Lithospheric structure and mantle wedge below 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, A. Argnani

S1.3-9 Investigation of the Preparatory Phase of the 2022 ML 5.7 Offshore Fano (Italy) Earthquake Through a Multiparametric and Multilayer Methodology

M. Orlando, A. De Santis, M. De Caro, L. Perrone, S.A. Campuzano, G. Cianchini, A. Piscini, S. D'Arcangelo, M. Calcara, C. Fidani, A. Nardi, D. Sabbagh, M. Soldani

S1.3-10 GNSS and InSAR contribution to slope stability models: a case study in NE-Italy

L. Tunini, D. Zuliani, F. Di Traglia, L. Borselli, C. de Luca, T. Nolesini,

S1.3-11 A proposal for the physical modeling of ghost geodetic transients

D. Zaccagnino, M.M. C. Carafa, C. Doglioni

S1.3-12 MARGE project: from magnetotelluric modelling to Space Weather risk

G. Pignatiello, M. Balasco, I. Coco, M. De Girolamo, M. Di Persio, F. Giannattasio, C. Gizzi, V. Materni, L. Miconi, M. Miconi, G. L. Piangiamore, G. Romano, V. Romano, L. Santarelli, V. Sapia, S. Spadoni, R. Tozzi, S. Tripaldi, A. Siniscalchi, P. De Michelis