



DIPARTIMENTO DI SCIENZE DELLA TERRA  
Sapienza, Università di Roma

DIPARTIMENTO  
DI SCIENZE DELLA TERRA



SAPIENZA  
UNIVERSITÀ DI ROMA

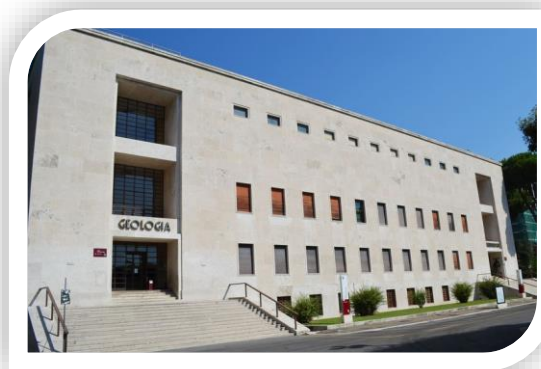
ROMA  
TRE  
UNIVERSITÀ DEGLI STUDI

# Roma chiama Roma

seconda edizione  
22 e 23 Gennaio 2024

Dalle ore 9:00 alle ore 18:00  
Aula Gismondi e Aula Ponzi

Dipartimento di Scienze della Terra - Sapienza Università di Roma  
Edificio CU005 (ingresso Mineralogia)  
Piazzale Aldo Moro n. 5



*I dottorandi in Scienze della Terra delle due Università si incontrano in due diverse giornate dedicate a presentazioni orali, poster, dibattiti e scambi scientifici.*

PIAZZALE  
A. MORO, 5  
ROMA



DOTTORATO DI RICERCA  
IN SCIENZE DELLA TERRA



**SCIENZE**  
Dipartimento di Eccellenza

# Programma:

## 22 Gennaio - Aula Ponzi II



**Ore 8:55 – Proff. Fabio Trippetta and Paola Tuccimei – Meeting introduction**

### Oral presentations

**Chairperson: Sara Capriotti**

Ore 9:00 – Beatrice Bartolucci\*: ENVISAGE - Conservative and sustainable methodologies for the energy requalification of historic buildings (La Sapienza)

Ore 9:15 - Francesca Benedetti\*: Protection and consolidation of the stone heritage: the role of carbonatogenic bacteria (La Sapienza)

Ore 9:30 – Matilde Kratter (online)\*: Evaluation of bio-deterioration potential in the UNESCO site Etruscan Necropolis of Tarquinia (La Sapienza)

Ore 9:45 – Ylenia Vassallo\*: Oxford Nanopore Technologies for Biocodicology: a case study on a 15th-century parchment (La Sapienza)

Ore 10:00 – Laura Giuliani\*: High Viscous Polymeric Dispersion: an innovative versatile soft matter for cleaning stone materials (La Sapienza)

Ore 10:15 – Isabella Ercoles\*: Provenance study using TIMS spectrometry on Zeus/Owl coins minted at Velia (Italy): Isotope and Archaeometallurgy (La Sapienza)

Ore 10:30 - 11:30 - *Pausa caffè + Poster (Aula Gismondi II)*

**Chairperson: Laura Calzolari**

Ore 11:30 – Francesca Boccaccini: Historical metals conservation: disposable substrates and high-performing systems for cleaning and protection (La Sapienza)

Ore 11:45 – Giulia Boccacci: Towards a new vision for the immovable heritage: preventive conservation and adaptive reuse (La Sapienza)

Ore 12:00 – Matteo Giaccari: Life in the cradle of civilization: preliminary results on a isotopic study on mobility in ancient Southern Mesopotamia (La Sapienza)

Ore 12:15 – Riccardo Tomasini: Diachronic reconstruction of human-environmental relationship: archeobotany at the Unesco World Heritage site of Butrint (Albania) (La Sapienza)

Ore 12:30 – Marta Porcaro: Comparative archaeometric study of Etruscan and Nuragic bronzes using a multi-analytical approach (La Sapienza)

Ore 12:45 - 14:00 - *Pausa Pranzo*

# Programma:

## 22 Gennaio - Aula Ponzi II



### Oral presentations

**Chairperson: Marta Zocchi**

Ore 14:00 – Lisa Vergelli\*: Environment-risk assessment as a preventive conservation strategy for effective short- and long-term management of cinematographic archives (La Sapienza)

Ore 14:15 – Adi Sela Wiener\*: CSMs | City Scape Materials and Materiality Redefining urban heritage materiality: a conceptual study of Jerusalem (La Sapienza)

Ore 14:30 – Martina Trocchi\*: X-ray microtomography for fossil dental tissues analysis: the case study of Krapina Neanderthals (Croatia, 130 ka) (La Sapienza)

Ore 14:45 – Chiara Cavasinni\*: Pollen-based reconstruction of Holocene vegetation in a coastal subsiding plain: the case of Sybaris Plain (La Sapienza)

Ore 15:00 – Pablo Vera Polo\*: Palynological analysis of the MIS 11c Interglacial from Fucino Basin, Central Italy (La Sapienza)

Ore 15:15 – Chiara Biribicchi\* (online): Sustainable Cultural Heritage Conservation: new green materials for the cleaning of artworks – (La Sapienza)

Ore 15:30 - 16:30 - *Pausa Caffè + Poster (Aula Gismondi II)*

# Programma:

## 22 Gennaio - Aula Gismondi I



**Ore 8:55 – Proff. Paolo Ballato and Silvio Mollo – Meeting introduction**

### Oral presentations

**Chairperson: Francesca Rossetti**

Ore 9:00 – Denise Petronelli: Multiscale geomorphological analysis of primary and erosive-depositional processes in submarine volcanic environments of the Aeolian Island (La Sapienza)

Ore 9:15 – Selma Sari: The Early/Middle Pleistocene Climate Transition in the Eastern Mediterranean; An integrated approach to reconstruct its impact on the evolution of the SW Turkey sedimentary basins (Roma3)

Ore 9:30 – Annalisa Sannino: Erosion dynamic modelling in semi-humid badlands areas: the role of land use change (La Sapienza)

Ore 9:45 – Mohammad Moumeni: Tectonics, Lithology, and Climate Interaction in the Landscape Evolution of NW Iranian Plateau (La Sapienza)

Ore 10:00 – Chiara Bazzucchi: Morphotectonic evolution and erosional processes of the Albanides-Hellenides orogenic belt (Roma3)

Ore 10:15 – Andrea Apuzzo: Fracture Mapping and Directional Analysis at ESA's Rosalind Franklin landing site, Oxia Planum, Mars (Roma3)

Ore 10:30 - 11:30 - *Pausa caffè + Poster (Aula Gismondi II)*

**Chairperson: Diego Marianelli**

Ore 11:30 – Marta Pioggia\*: Sign me in - accessibility and usability of MUST's (Museo Universitario di Scienze della Terra) panels for deaf visitors: an analysis (La Sapienza)

Ore 11:45 – Riccardo Maria Ridolfi\*: Application of a site-screening method to an industrial dataset of depleted reservoirs from Italy for UHS purposes (La Sapienza)

Ore 12:00 – Giuseppe Vico\*: The role of seismic attributes analysis in a geothermal pre-feasibility case study in the Internal Central Apennines (La Sapienza)

Ore 12:15 – Silvio Pardo\*: CO2 storage for the energetic transition: geomechanical modeling and laboratory experiments (La Sapienza)

Ore 12:30 – Pegah Dinani\*: Carbon sequestration potential in abandoned fractured reservoirs- an integrated subsurface study (La Sapienza)

Ore 12:45 – Irene Menichelli - Deep structure and dynamics of the circum-Mediterranean orogens: Adria continental subduction case (Roma3)

Ore 13:00 - 14:00 - *Pausa pranzo*

\*Partecipates to Research Dissemination Travel Award

# Programma:

## 22 Gennaio - Aula Gismondi I



### Oral presentations

**Chairperson: Chiara Bazzucchi**

Ore 14:00 – Francesca Rossetti: Tectonic and exhumation history of the Albanian Dinarides orogenic belt (Roma3)

Ore 14:15 – Fabio Fierozzi: Tectonic evolution of the eastern Adria margin at the Dinarides-Hellenides junction (Roma3)

Ore 14:30 – Giulia Schirippa Spagnolo: Application of C, O, Sr, and carbonate clumped isotopes to syn-tectonic calcites (La Sapienza)

Ore 14:45 – Adriana Damato: Hydrogeological monitoring for assessing the interaction between changes in groundwater and tectonically active areas (La Sapienza)

Ore 15:00 – Giorgio Arriga: Long-term evolution of seismogenic normal faults in the Central Apennines (Roma3)

Ore 15:15 – Andrea Fiorini: Circulation of fluids within fold-and-thrust belts: the role of frontal thrusts and transverse zone (La Sapienza)

Ore 15:30 - 16:30 - *Pausa Caffè + Poster (Aula Gismondi II)*

**Chairperson: Giorgia Berardo**

Ore 16:30 – Davide Zaccagnino\*: Towards physically consistent seismic hazard modeling (La Sapienza)

Ore 16:45 – Giacomo Mastella: Decoding the Megathrust Seismic Cycle: from Laboratory Analog Models to the Natural Prototype through the Lens of Machine Learning (Roma3)

Ore 17:00 – Henrique Berger Roisenberg: Physical characterization of global continental crust from seismic attenuation (Roma3)

Ore 17:15 – Maria Eugenia Locchi\*: Improve earthquake kinematic models on finite fault through dynamic constraints and uncertainty studies (La Sapienza)

Ore 17:30 – Rossella Fonzetti\*: Imaging and active faults properties (Roma3)

Ore 17:45 – Federico Pignalberi\*: Acoustic signatures of slow and fast laboratory earthquakes (La Sapienza)



# Programma:

## 23 Gennaio - Aula Gismondi I



### Oral presentations

**Chairperson: Antonio Angellotti**

Ore 9:00 – Rengin Ozsoy\*: Tephrochronologic study on Hasandağ pyroclastic deposits (Central Anatolian Volcanic Province) in order to reconstruct its recent explosive volcanic history (La Sapienza)

Ore 9:15 – Giada Fernandez\*: Tephrochronology, modelling and dynamics of large-magnitude eruptions in the central Mediterranean area (La Sapienza)

Ore 9:30 – Beatrice Schiavon\*: Petrological monitoring of magma-mush dynamics at Stromboli: Insights on the transition from mild to violent eruptive styles (La Sapienza)

Ore 9:45 – Claudia Federica Arcifa: Structural and seismological survey of caldera unrest (Roma3)

Ore 10:00 – Andrea Magli: Holocene eruptive history of the Cumbre Vieja (La Palma, Canary Islands) volcano: insights from paleomagnetic dating of lava flows (Roma3)

Ore 10:15 – Clothilde Biensan: Linking styles of active magma degassing with fragmentation dynamics for mafic magmas: a multiparametric approach (La Sapienza)

Ore 10:30 - 11:30 - *Pausa caffè + Poster (Aula Gismondi II)*

**Chairperson: Federico Feliziani**

Ore 11:30 – Carmine Magri: The depth-to-surface dynamics of silicic peralkaline magmas from Pantelleria Island (Roma3)

Ore 11:45 – Antonio Angellotti: A multi analytical investigation of the inclusions in a lithospheric diamond reveals possible metasomatism-driven mechanisms for its origin at high pressure (La Sapienza)

Ore 12:00 – Claudia Masciulli\*: Multi-sensor/Multi-temporal satellite remote sensing for the monitoring of deformation processes: advanced modelling with Machine Learning (La Sapienza)

Ore 12:15 – Giacomo Santicchia\*: Landslide monitoring through the use of multi spectral monitoring tools: the case study of poggio Baldi monitoring Lab (La Sapienza)

Ore 12:30 – Maria Elena Di Renzo- Integrative Approach to Multi-Hazard Risk Management for Linear Infrastructures (La Sapienza)

Ore 12:45 -14:00 - *Pausa pranzo*

# Programma:

## 23 Gennaio - Aula Gismondi I



### Oral presentations

**Chairperson: Fabio Fierozzi**

Ore 14:00 – Federico Feliziani: Multistage evolution of coastal slopes as a proxy for climatic influence on landslides (La Sapienza)

Ore 14:15 – Matteo Ferrarotti: Quantitative time-dependent scenarios of geo-multihazard related to preparatory thermal factors applied to strategic infrastructures (La Sapienza)

Ore 14:30 – Simona Marano: Advanced non-invasive and high resolution monitoring of ground instabilities in the perspective of multihazard scenarios (La Sapienza)

Ore 14:45 – Rossana Napolitano: Set - up of a comprehensive framework for geo - hydrological hazard and risk assessment for statutory purposes (La Sapienza)

Ore 15:00 – Valeria Lorenzi: New insights on groundwater flow of the Tavo tapped karst springs (Gran Sasso aquifer, Central Apennines) using tracer tests (La Sapienza)

Ore 15:15 – Giulia Felli: Integrated 4.0 approach for environmental management and remediation of contaminated sites (La Sapienza)

Ore 15:30 – 16:30 - *Pausa Caffè + Poster (Aula Gismondi II)*

**Chairperson: Clothilde Biensan**

Ore 16:30 – Lorenzo Animalì: Characterization and use of commercial biochar for water purification in real case studies (Roma3)

Ore 16:45 – Manuela Portaro: Characterization of anti-radon membranes using a scale model room and performance evaluation in two case studies (Central Italy) (Roma3)

Ore 17:00 – Flaminia Gianchiglia: Environmental and health risk assessment of volcanic ash in (La Sapienza)

Ore 17:15 – Maria Cristina Di Carlo: Hazard assessment of fibrous antigorite in areas of the Calabrian-Lucanian Apennines (Italy) (La Sapienza)

Ore 17:30 – Eduardo Di Marcantonio: Isotopic techniques applied to the study of dispersion and degradation of chlorinated solvents: from batch to field (La Sapienza)

Ore 17:45 – **Proff. Paolo Ballato, Fabio Trippetta, Paola Tuccimei and Silvio Mollo: Greetings**

# Programma:

## 22 e 23 Gennaio - Aula Gismondi II



Ore 10:30 - 11:30

Ore 15:30 - 16:30

### Posters

- **Eleonora Cerafogli:** An archaeobotanical study in the Holy Sepulcher Basilica (Jerusalem, Israel) – La Sapienza
- **Greta Peruzzi:** Synthesis and characterization of SERS substrate for the diagnostics and environmental monitoring of Cultural Heritage – La Sapienza
- **Elisa Villani:** New NMR protocols to study and monitor the dynamics, interactions and consolidation process of cellulosic material – La Sapienza
- **Marco Bianchini:** Grasping submarine landslides: combining geomorphological parameters and geostatistical analyses to assess geohazards in the Italian seas – La Sapienza
- **Diego Marianelli:** The Oi-1 and Mi-1 events: insights from shallow and deep carbonate successions of the central and western Mediterranean – La Sapienza
- **Martina Orlando:** Analysis of macroseismic data of seismic sequences: the case of 1783 Calabria earthquakes – Roma3
- **Sara Emili:** Evaluation of the geothermal potential in the Acque Albule Basin (RM) through a multidisciplinary approach – Roma3
- **Giovanni Guglielmi:** Ductile to elasto-frictional behavior in evaporite-bearing rocks – La Sapienza
- **Marta Zocchi:** Remote Sensing geomorphological applications supported by Artificial Intelligence for integrating and updating landslide inventories – La Sapienza
- **Giorgia Berardo:** Prevention and management of NaTech risk triggered by seismic events, in Major-Hazard Industrial Plants – La Sapienza
- **Roberto Pizzi:** All-hazard approach for preparedness and response to NaTech events in the framework of climate change – Roma3
- **Riccardo Luppi:** Study of color mechanisms in natural and treated gemstone tourmalines, with definition of a scientific protocol – La Sapienza
- **Alice Marconato:** Elongated Mineral Particles in biological fluids: a possible key for modelling their in vivo behaviour – La Sapienza
- **Enrico Califano:** Decoding the physico-chemical conditions of magmas triggering the 2022 eruption of Hunga Tonga-Hunga Ha'apai – La Sapienza
- **Francesca Innocenzi:** Kamafugite magmatism: definition, source characteristics and tectonic implications – La Sapienza
- **Giulia Marras:** Evidence of back-transformation reactions and redox-driven diamond formation from bridgmanite-like inclusions trapped in superdeep diamonds – La Sapienza
- **Gabriele Giuliani:** Effect of magma-carbonate interaction on the viscosity of a phonotephrite melt from Vesuvius (Italy) – Roma3
- **Laura Calzolari:** Unlocking the secrets of hydraulic Roman mortars for new applications – La Sapienza
- **Sara Capriotti:** Development of a Deep Learning model for the classification of ceramic thin sections – La Sapienza
- **Michele De Solda:** Application of Deep Learning Techniques for the Detection and Localization of Laboratory Earthquakes – La Sapienza
- **Michele Mauro:** Development of an active waveforms recording and synchronization system for rock mechanics laboratory experiments – La Sapienza
- **Francesco Mosconi:** Modeling micro-earthquakes induced by fluid injection – La Sapienza
- **Gabriele Paoletti:** Using Deep Learning to understand variations in fault zone properties – La Sapienza
- **Francesca Rossi:** The role of fault maturity and lithological heterogeneities in fault zone thickness: insights from field and seismological data – La Sapienza
- **Giuseppe Volpe:** Seismicity and Heterogeneous faults – La Sapienza