

Martedì 7 luglio 2026

AULA AUDITORIUM (11.30 - 13.30)

S11 - EXPLOSIVE ERUPTION PRODUCTS, DYNAMICS AND HAZARDS: FROM VOLCANIC PLUMES TO FLOWS INTEGRATING FIELD, EXPERIMENTAL AND MODELLING APPROACHES

Conveners: *Andrea Todde (UniFI), Ileana Santangelo (UniNA), Francesco Romeo (Uniroma1), Carla Tranquilino (UniBA)*

11.30 – 11.45

Satellite-based analysis of SO₂ plume emissions during the 2007-2016 Mt. Etna's lava fountains sequence

Pagano Matteo, Salerno Giuseppe, Di Grazia Giuseppe, Sellitto Pasquale

11.45 – 12.00

Statistical modelling of volcanic plume height at Mt. Etna using the seismic tremor

Mereu Luigi, Garcia Alexander, Zuccarello Luciano, De Angelis Silvio, Sciotto Mariangela, Scollo Simona

12.00 – 12.15

Investigating the Influence of Atmospheric Conditions on Etna Volcanic Plumes: Insights from Observations and Numerical Modelling

Nigro Daniele, Coltelli Mauro, Cassiani Massimo, Colombo Franco, Doglioni Giorgio, Mereu Luigi, Scollo Simona, Zardi Dino

12.15 – 12.30

Toward the quantitative analysis of plume dynamics and eruptive transitions at Stromboli volcano using AI-derived thermal metrics

Guerrero Tello Jose Francisco, Coltelli Mauro, Cavallaro Danilo, Firetto Carlino Marco

12.30– 12.45

Comparison of two methods used to predict mass eruption rate: insights from the 2010 Eyjafjallajökull eruption

Hetherington Morgan, Dioguardi Fabio, Dürig Tobias, Dawson Sue, Cuthbertson Alan

12.45– 13.15 (KEYNOTE)

Triggering mechanisms for paroxysmal activity at open-conduit volcanoes: the 2019 eruption crisis at Stromboli

Voloschina Marija, Métrich Nicole, Bertagnini Antonella, Marianelli Paola, Aiuppa Alessandro, Ripepe Maurizio, Insinga Laura, Ding Shuo, Plank Terry, Moussallam Yves, Pistolesi Marco

13.15– 13.30

DISCUSSIONE

**Martedì 7 luglio 2026
AULA 1 (11.30 - 13.30)**

S10 - CHALLENGES AND NEW WAYS TO UNDERSTAND THE DYNAMICS OF CAMPI FLEGREI CALDERA

Conveners: *Guido Giordano (UniRoma3), Roberto Isaia (INGV-OV)*

11.30 - 11.45

Longevity, evolution and eruption potential of the Campi Flegrei caldera

Giordano Guido, Grillo Teresa Oreade, Isaia Roberto, Nomade Sebastien, Giaccio Biagio, Lormand Charline, Vuadens Solène, Frontoni Alessandro, Caricchi Luca

11.45 - 12.00

The incremental caldera forming of the Neapolitan Yellow Tuff (Campi Flegrei, Italy)

Gonzalez Gino, Isaia Roberto, Giaccio Biagio, Pereira Alison, Nomade Sebastien, Smith Victoria, Costa Antonio, Dell'Erba Francesco, Fernandez Giada, Kane Gavin, Monaco Lorenzo, Natale Jacopo, Sulpizio Roberto

12.00 - 12.15

Neapolitan Yellow Tuff revisited: a new look to stratigraphy and eruptive dynamics of a complex eruption of Campi Flegrei caldera (Italy)

Sulpizio Roberto, Gonzalez Ilama Gino Steven, Giaccio Biagio, Isaia Roberto, Lucchi Federico, Natale Jacopo, Costa Antonio, Dellino Pierfrancesco, Mele Daniela, Monaco Lorenzo, Amato Vincenzo, Nomade Sebastien, Pereira Alison, Siani Giuseppe

12.15 - 12.30

Reservoir configuration, trigger mechanisms, and timescales of shallow magma transfer at Campi Flegrei caldera, Italy

Lormand Charline, González-Ilama Gino, Vuadens Solène, Guerrier Stéphane, Isaia Roberto, Giordano Guido, Stock Michael, Caricchi Luca

12.30 - 12.45

Unrest at Campi Flegrei caldera as a factor for a phreatic/hydrothermal event within the Accademia-Solfatara area

Isaia Roberto, Carlino Stefano, De Paola Claudio, Di Giuseppe Maria Giulia, Pagliara Fabio, Pivetta Tommaso, Sposato Monica, Troiano Antonio

12.45 - 13.00

25 Years of Multi-sensors Thermal Infrared Satellite Time Series for Monitoring the Volcanic Unrest at Campi Flegrei Caldera

Galletto Federico, Rabuffi Federico, Silvestri Malvina, Buongiorno Maria Fabrizia, Musacchio Massimo

13.00 - 13.15

Gravity-height variations inferred from time-lapse measurements during the ongoing Campi Flegrei caldera unrest

Carlino Stefano, Pivetta Tommaso, De Martino Prospero, Riccardi Umberto

13.15 - 13.30

Birth and growth of a volcano-tectonic fault within the deformation pattern during the current volcanic unrest at Campi Flegrei caldera (Italy)

Alfonsi Giada, Giordano Guido, Salvini Francesco, Bianco Francesca, Tramelli Anna, De Martino Prospero, Di Vito Mauro

Martedì 7 luglio 2026
AULA 2 (11.30 - 13.30)

S08 - GEOPHYSICAL CHARACTERIZATION OF VOLCANIC SYSTEMS: STRUCTURE, DYNAMICS, AND MONITORING

Conveners: Maria Giulia di Giuseppe (INGV-OV), Antonio Troiano (INGV-OV)

11.30 - 11.45

MEDUSA: 10 years of continuous monitoring of the Campi Flegrei area

Guardato Sergio, Riccio Rosario, Macedonio Giovanni, Chierici Francesco, Dupuis Marco, De Martino Prospero, Bobbio Antonella, Scarpato Giovanni, Iannaccone Giovanni

11.45 - 12.00

Continuous Electromagnetic Monitoring at Campi Flegrei Caldera

Buonaiuto Rosa, Di Giuseppe Maria Giulia, Troiano Antonio, Isaia Roberto, Di Maio Rosa

12.00 - 12.15

Multiparametric reciprocity-based volcanic monitoring with ambient seismic noise

Almagro Vidal Carlos

12.15 - 12.30

Absolute and relative gravity measurements at Etna volcano (Italy) in the period 2009 - 2025

Dottore Nancy, Greco Filippo, Carbone Daniele, Contrafatto Danilo, Messina Alfio, Mirabella Luca

12.30 - 12.45

Imaging hydrothermal systems in the Aeolian Islands: electrical resistivity constraints on subsurface structure and fluid pathways

De Paola Claudio, Di Giuseppe Maria Giulia, Isaia Roberto, Troiano Antonio, Boni Pietro, Fedele Alessandro, Gonzalez Gino, Pagliara Fabio, Sposato Monica

12.45 - 13.00

3D gravity modelling of Pantelleria Island: insights into the geothermal system

Ricciardi Lorenzo, Florio Giovanni, Carlino Stefano, Pivetta Tommaso, Ricciardi Umberto, Zampa Luigi Sante, Ferrara Giuseppe, Di Giuseppe Maria Giulia

13.00 - 13.15

Three-dimensional thermo-fluid dynamic modeling of Pantelleria Island (Sicily, Italy) constrained by geophysical data for geothermal resource assessment

Califano Carla, Carlino Stefano, Di Giuseppe Maria Giulia, Isaia Roberto, Pivetta Tommaso, Troiano Antonio, Di Maio Rosa

13.15 - 13.30

Thermal structure and magmatic controls on the Sabatini volcanic system (central Italy): insights from geophysical constraints and time-dependent modelling

Godono Francesca, Gola Gianluca, Rabiee Ahmad, Rossetti Federico, Giordano Guido

AUDITORIUM
(14.30 - 17.30)

[Continua] S11 - EXPLOSIVE ERUPTION PRODUCTS, DYNAMICS AND HAZARDS: FROM VOLCANIC PLUMES TO FLOWS INTEGRATING FIELD, EXPERIMENTAL AND MODELLING APPROACHES

Conveners: Andrea Todde (UniFI), Ileana Santangelo (UniNA), Francesco Romeo (Uniroma1), Carla Tranquilino (UniBA)

14.30 - 14.45

Unravelling the Stratigraphy and Eruptive Dynamics of the Pietre Cotte and the 1888-90 eruptions activities, Vulcano (Italy)

Panelli Giulia, Roverato Matteo, Forni Francesca, De Astis Gianfilippo, Natale Jacopo, Sulpizio Roberto, Tranne Claudio Antonio, Lucchi Federico

14.45 - 15.00

Tephra characteristics of small-volume, lithic-rich deposits at Campi Flegrei: New insights from the Santa Maria delle Grazie explosive eruption

Halfhill Jane, Todde Andrea, Pistolesi Marco, de' Michieli Vitturi Mattia, Isaia Roberto, Montanaro Cristian, Scheu Bettina

15.00 - 15.15

The 2 June 2025 pyroclastic density current at Mount Etna: dynamics and hazard of a widely observed event

Andronico Daniele, Alparone Claudio Salvatore, Behncke Boris, Breard Eric, Cappello Annalisa, Ciancitto Francesco, Del Carlo Paola, de' Michieli Vitturi Mattia, Di Roberto Alessio, Esposti Ongaro Tomaso, Ganci Gaetana, Makris Symeon, Pardini Federica, Scateni Bianca, Zuccarello Francesco, Claudia Eljas Parra

15.15 - 15.30

Generation of Pyroclastic Density Currents at Mount Etna: triggering processes, related deposits and links to eruptive styles

Costa Giorgio, Viccaro Marco

15.30 - 15.45

Triggering of Deposit-Derived Pyroclastic Density Currents: Insights from High-Temperature Rheology of Lava and Spatter from the 1944 Vesuvio eruption

Grillo Teresa Oreade, Falasconi Alessia, Frontoni Alessandro, Buono Gianmarco, Di Fiore Fabrizio, Pappalardo Lucia, Romano Claudia, Di Traglia Federico, Vona Alessandro

15.45 - 16.00

Probabilistic assessment of hazard related to pyroclastic currents at Ischia

Marfella Davide Emanuele, de Vita Sandro, Macedonio Giovanni, Sansivero Fabio, Selva Jacopo

16.00 - 16.15

Rheology of Pyroclastic Density Currents of the Pollena ACE472 eruption (Vesuvius): first insights from laboratory experiments

Ammar Muhammad, Dioguardi Fabio, Mele Daniela, Dellino Pierfrancesco

16.15 – 16.30

From particle comminution to large-scale granular flows: experimental insights into Pyroclastic Density Currents at mafic volcanoes

Costa Giorgio, Sarocchi Damiano, Neglia Francesco, Montenegro Rio Anibal, Rodriguez Luis Angel, Dioguardi Fabio, Viccaro Marco

16.30 – 16.45

A large-scale slit rheometer for rheological characterization of volcanic mud and granular flows

Tranquilino Carla, Montenegro Anibal, Dioguardi Fabio, Caballero Lizeth, Borselli Lorenzo, Dellino Pierfrancesco, Sarocchi Damiano

16.45 – 17.00

Multi-sensor geophysical observations constrain lahar flow dynamics at Volcan de Fuego, Guatemala

Gheri Duccio, Duller Rob, Roca Palma Amilcar Elias, Woodhouse Mark, Phillips Jeremy, De Angelis Silvio

17.00 – 17.15

Lahars at Stromboli Island (Italy): insights from fieldwork and numerical modelling

Gianardi Roberto, Andronico Daniele, Bisson Marina, de Michieli Vitturi Mattia, Pistolesi Marco, Spinetti Claudia

17.15– 17.30

DISCUSSIONE

Martedì 7 luglio 2026

AULA 1 (14.30 - 17.30)

S07 - TOWARDS OPEN SCIENCE IN VOLCANOLOGY: DATA COLLECTION, ARCHIVING, SHARING AND REUSE

Conveners: *Marina Bisson (INGV-PI), Lucia Cacciola (INGV-OE), Rossana Paciello (INGV-Roma1), Gabriele Tarabusi (INGV-BO)*

14.30 - 14.45

An Overview on the Management of the Volcanological Data

Puglisi Giuseppe, Andrews Benjamin, Massaro Silvia, Widiwijayanti Christina

14.45 - 15.00

Overcoming fragmentation in volcanological community: The EPOS VOLC TCS framework for FAIR data management and Open Science

Indovina Enrico, Spampinato Letizia, Reitano Danilo, Cacciola Lucia, Puglisi Giuseppe, Nave Rosella

15.00 - 15.15

The EPOS Volcanological Software Catalog: a Service to the community

Montagna Chiara Paola, Esposti Ongaro Tomaso, Paciello Rossana

15.15 - 15.30

A relational geo-spatial database for Stromboli volcano: challenges and perspectives

Tarquini Simone, Martinelli Francesco, Tarabusi Gabriele, De Beni Emanuela, Spinetti Claudia, Scarlato Piergiorgio, Vinci Stefano, Bisson Marina

15.30 - 15.45

GeoChem: a volcanic data model for solid and gas samples within the European volcanological community framework

Cacciola Lucia, Corsaro Rosa Anna, Federico Cinzia, Reitano Danilo, Spampinato Letizia, Geyer Adelina

15.45 - 16.00

Data model for the multidisciplinary cataloguing of volcanic ash

Caruso Simona, Cacciola Lucia, Andronico Daniele, Cristaldi Antonio, Miraglia Lucia

16.00 - 16.15

A database for the identification of tectonic structures at Mt. Etna via soil gas prospecting

Bonfanti Pietro, Giammanco Salvatore

16.15 - 16.30

A satellite-derived dataset of Volcanic Radiative Power for global analysis of volcanic activity (2000-2025)

Coppola Diego, Laiolo Marco, Aveni Simone, Campus Adele, Massimetti Francesco

16.30 - 16.45

Advancing Open Science in Volcanology: OEDataRep - the FAIR compliant Data Repository

Pistagna Fabrizio, Torrisi Mario, Cassisi Carmelo, Montalto Placido, Locati Mario

16.45 – 17.00

IPSES: The Italian Platform for Solid Earth Sciences as a catalyst for Open Science and data reuse

Locati Mario, Tarabusi Gabriele, Cacciola Lucia

17.00 – 17.15

PEOS: an open and FAIR Earth Observation e-infrastructure for volcanological data integration and reuse

Spina Marco, Marcocci Carlo, Pica Emanuele, Viola Massimo, Sensale Gianpaolo, Guglielmi Nicola, Romano Vincenzo

17.15– 17.30

DISCUSSIONE

Martedì 7 luglio 2026
AULA 2 (14.30 - 17.30)

S01 - MULTI-HAZARD AND RISK IN VOLCANIC SETTINGS: PAST EFFORTS, RECENT CRISES, AND THE ROAD FROM ASSESSMENT TO RISK MANAGEMENT

Conveners: *Annalisa Cappello (INGV-OE), Antonio Colombi (DPC), Laura Sandri (INGV-BO), Eugenio Privitera (INGV-OE)*

14.30 - 14.45

A lightweight modular MultiGAS platform for adaptable gas monitoring across volcanic and wildfire environments

Mikhail-Lee Suzanne, Stix John, Villarruel Gustavo, Asomaning Jacob

14.45 - 15.00

Advancing lava flow hazard modelling with optimized statistical and deterministic simulation workflows

Zuccarello Francesco, Di Biasi Marco, Bllotta Giuseppe, Cannavò Flavio, Cappello Annalisa, Cristofaro Roberta, Ganci Gaetana

15.00 - 15.15

A long-term probabilistic gas hazard analysis at Vulcano Island (Aeolian Archipelago, Italy)

Massaro Silvia, Granieri Domenico, Bisson Marina, Carapezza Maria Luisa, Diliberto Iole Serena, Dioguardi Fabio, Iacono Francesca, Macedonio Giovanni, Paonita Antonio, Ranaldi Massimo, Ricci Tullio, Salerno Giuseppe, Stocchi Manuel, Tamburello Giancarlo, Tarchini Luca, Costa Antonio

15.15 - 15.30

Reconstruction and probability hazard mapping of deposit-derived pyroclastic density currents at Stromboli

Neri Augusto, Bevilacqua Andrea, Geddo Zeno, Corna Lucas, Di Roberto Alessio, Di Traglia Federico, Pompilio Massimo, Bertagnini Antonella, de' Michieli Vitturi Mattia, Flandoli Franco, Tadini Alessandro

15.30 - 15.45

Transitioning from Multi-Hazard Assessment to Integrated Risk at Mt. Etna

Pessina Vera, Garcia Alexander, Sandri Laura, Meroni Fabrizio, Cappello Annalisa

15.45 - 16.00

Shared efforts to link multi-hazard dynamics and social perception in Stromboli (Italy): The NEAM-COMMITMENT project

Fracassi Umberto, Aguirre Ayerbe Ignacio, Amato Alessandro, Bevilacqua Andrea, Cappello Annalisa, Charalampakis Marinos, Coltelli Mauro, Crescimbene Massimo, Cugliari Lorenzo, Daskalaki Elena, Di Manna Pio, Filosa Silvia, Graziani Laura, Kalligeris Nikos, Lorito Stefano, Mangione Domenico, Merino Gonzalez-Pardo Maria, Minicocci Arianna, Privitera Eugenio, Roccella Cristina, Romano Fabrizio, Russo Domenico, Scalzo Antonella, Tadini Alessandro

16.00 - 16.15

Probabilistic hazard maps of lahar inundation in case of a reference-size eruption at Campi Flegrei

Sandri Laura, Massaro Silvia, de' Michieli Vitturi Mattia, Di Vito Mauro Antonio, Bisson Marina, Sulpizio Roberto, Costa Antonio

16.15 – 16.30

Towards a complete and quantitative description of the volcanic hazard at Campi Flegrei caldera with implications for the emergency planning

Ferrara Salvatore, Selva Jacopo, Bianco Francesca, Marzocchi Warner

16.30 – 16.45

PEOS: an open Earth Observation e-infrastructure supporting multi-hazard monitoring and risk management in volcanic settings

Spina Marco, Marcocci Carlo, Pica Emanuele, Viola Massimo, Sensale Gianpaolo, Guglielmi Nicola, Romano Vincenzo

16.45 – 17.00

The European Civil Protection exercises as a tool for assessing volcanic risk management. The 2025 volcanic MODEX exercise in Tenerife

Colombi Antonio, Bosi Vittorio, Ciolli Stefano, Mangione Domenico, Civico Riccardo, Calderoli Giovanni

17.00 – 17.30

DISCUSSIONE