
GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S4. MINERALS, ENVIRONMENT AND MEDICAL USES

Conveners and Chairpersons: Claudia Belviso (CNR-IMAA, Matera), Giovanni Grieco (UNIMI), Pietro Marescotti (UNIGE)

Aula R

4-1 08.30 - 09.00

[KEYNOTE] Capella S.*, Visonà S., Osculati A. & Belluso E.: Occupational and anthropogenic environmental exposure during asbestos-cement production by FIBRONIT in Broni (Pavia): assessment of asbestos lung burden by SEM-EDS

4-2 09.00 - 09.15

Militello G.M.*, Gaggero L., La Maestra S., Sanguineti E., Yus González A. & Lavagnino G.: Lower and upper aspect ratio range to consider on quantitative determination of Elongated Mineral Particles (EMP) in bulk samples and in vitro study

4-3 09.15 - 09.30

Pascucci S.*, Palombo A., Santini F., Pignatti S., Ionca V., Cavalcante F. & Belviso C.: Hyperspectral thermal data to identify natural and manmade asbestos minerals: TASI-600 imagery case studies

4-4 09.30 - 09.45

Croce A.*, Rinaudo C., Grosso F., Erra S. & Amisano M.F.: Identification of asbestos fibers in tissues of patients affected by important diseases in extra respiratory systems

4-5 09.45 - 10.00

Di Benedetto F.*, Belluso E., Capella S., Giaccherini A., Romanelli M., Ciuffi B., Montegrossi G., Zoleo A. & Capacci F.: An EPR study of silica radicals in lung tissues with evidence of silicosis

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S5. GEOSCIENCES IN ARCHAEOOMETRY AND CULTURAL HERITAGE CONSERVATION

Conveners and Chairpersons: Marco Benvenuti (UNIFI), Anna Maria De Francesco (UNICAL), Claudio Mazzoli (UNIPD)

Aula L

5-1 08.30 - 09.00

[KEYNOTE] Germinario L.* & Oguchi C.T.: Weathering of anthropic caves of soft rock in the Kantō region, Japan

5-2 09.00 - 09.15

Giustetto R.*, Padovan S., Barale L. & Compagnoni R.: The Neolithic *greenstone* industry from Chiomonte (Turin Province, Northwestern Italy): archaeometric study and comparison with analogous findings

5-3 09.15 - 09.30

Santi P., Foresta Martin F., Spatafora F., De Vita S., Dell'Aquilano M. & Renzulli A.*: Volcanic millstones trade in the Mediterranean during the Hellenistic-Roman period: the impact on the production of manufacts and milling technique evolution at Ustica Island (Southern Tyrrhenian Sea, Italy)

5-4 09.30 - 09.45

Rispoli C.*, Cappelletti P., De Bonis A., Di Benedetto C., Esposito R., Graziano S.F., Guarino V. & Morra V.: Historical mortars beyond Pompeii: the example of Villa del Pezzolo (Sorrento Peninsula)

5-5 09.45 - 10.00

Scrivano S.*, Cabella R. & Giannattasio B.M.: Archaeometric contribution to the study of the Small Thermal Baths in the roman town of Nora (Sardinia): mortars and plasters

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S7. NEW FRONTIERS IN METAMORPHISM AND DEFORMATION-METAMORPHISM RELATIONSHIPS THROUGH CUTTING-EDGE ANALYTICAL, EXPERIMENTAL, NUMERICAL, AND THEORETICAL TECHNIQUES

Conveners and Chairpersons: Nadia Malaspina (UNIMIB), Sabrina Nazzareni (UNIPG), Alberto Vitale Brovarone (UNITO), Stefano Zanchetta (UNIMIB)

Aula M

7-1 08.30 - 08.45

Menant A., Sternai P.* & Gerya T.: Magmatic forcing of Cenozoic climate?

7-2 08.45 - 09.00

Giuntoli F.*, Vitale Brovarone A. & Menegon L.: High pressure abiotic methanogenesis and strain localization in metamorphosed carbonate rocks

7-3 09.00 - 09.15

[KEYNOTE] Piccoli F.*, Ague J.J., Chu X. & Vitale Brovarone A.: Multistage metasomatism recorded in HP metamorphic unit: a natural example of porosity waves in subduction zones?

7-4 09.15 - 09.30

[KEYNOTE] Schwarzenbach E.M.*, Li J., John T., Caddick M.J., Petroff M. & Gill B.C.: Sulfur transfer within subduction zones: Evidence from exhumed mafic and ultramafic slab material

7-5 09.30 - 09.45

Carvalho B.B.*, Bartoli O., Cesare B., Tacchetto T., Gianola O., Ferri F. & Aradi L.E.: Fate of primary COH fluid inclusions in garnet from high-grade rocks

7-6 09.45 - 10.00

Ferrero S.*, Wannhoff I., Darling R., Wunder B., Laurent O., Ziemann M.A., Günter C. & O'Brien P.: Micropetrology of megagarnets: nanogranitoids reveal presence of melt during formation of the giant garnets of Barton Mine (Adirondacks, US)

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S16. PLANETARY EVOLUTION: NEW INSIGHTS FROM REMOTE SENSING, *IN-SITU*, TERRESTRIAL ANALOGUES AND METEORITE STUDIES

Conveners and Chairpersons Maria Sgavetti (UNIPR), Mara Murri (UNIPV), Valentina Galluzzi (IAPS-INAF, Roma), Riccardo Pozzobon (UNIPD), Cristian Carli (IAPS-INAF, Roma)

Aula Q

16-1 08.30 - 09.00

[KEYNOTE] Massironi M.*, Pozzobon R., Franceschi M. & Penasa L.: From Planetary surface mapping to Planetary subsurface structures

16-2 09.00 - 09.15

Baioni D.*, Gutierrez F., García-Arnay A., Luzzi E., Parenti C., Sevil J. & Nesci O.: Two possible episodes of karstification in the equatorial layered deposit within Kotido crater, Arabia Terra, Mars
CANCELLATA

Shelaev A.V. & Shubin A.B.: Multimodal optical platform based on Ramos N500 Confocal Microscope **FUORI PROGRAMMA**

16-3 09.15 - 09.30

(Invited) Antonangeli D.*, Badro J., Boccato S., Morard G., Rivoldini A., Siebert J., Xu F. & the InSight Science Team: InSight, first months on Mars and laboratory experiments to complement planetary observations

16-4 09.30 - 09.45

Italiano F., Di Bella M.*, Sabatino G., Barbieri R., Cavalazzi B., Ferretti A., Danovaro R., Romeo T., Andalaro F., Esposito V., Tripodo A., Scotti G. & Quartieri S.: Hydrothermal iron ooids on Earth as homologues of hematite spherules discovered on Mars **VARIAZIONE, PRESENTATO COME POSTER**

16-5 09.45 - 10.00

Zambon F.*, Carli C., van der Bogert C.H., Hiesinger H., Altieri F., Giacomini L. & Massironi M.: Spectral variations across Apollo basin on the Moon

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S22. FROM SEISMIC SOURCE TO FAULT USING MULTIDISCIPLINARY APPROACHES: THE CENTRAL AND SOUTHERN APENNINES AS NATURAL LABORATORY

Conveners and Chairpersons Massimiliano Porreca (UNIPG), Debora Presti (UNIME), Rita de Nardis (UNICH)

Aula D

22-1 08.30 - 08.45

[KEYNOTE] Scarpa R.*: The southern Italy 1980 earthquake and the rupture processes of large earthquakes in Italy

22-2 08.45 - 09.00

Barreca G., Scarfi L., Gross F., Monaco C.* & De Guidi G.: Fault pattern and seismotectonic potential at the south-western edge of the Ionian Subduction system (southern Italy): new field and geophysical constraints

22-3 09.00 - 09.15

Menichetti M.*, Tirincanti E. & Roccheggiani M.: Earthquake ruptures geometries as tools for seismic hazard assessment

22-4 09.15 - 09.30

Caporali A.*, Zurutuza J. & Bertocco M.: A time dependent model of elastic stress in the Central Apennines, Italy

22-5 09.30 - 09.45

Montone P.* & Mariucci M.T.: The shallow crust in Central Italy depicted by geophysical deep well logs

22-6 09.45 - 10.00

Trippetta F.*, Barchi M.R., Borromeo O., Mastellone D., Rosset G. & De Paola N.: Seismic velocity variations of carbonates across the Apennines

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S25. GEOSCIENCES FOR DISASTER RISK REDUCTION: PROBLEMS, SOLUTIONS AND PERSPECTIVE

Conveners and Chairpersons: Fausto Guzzetti (CNR IRPI, Perugia), Warner Marzocchi (UNINA)

Aula A

25-1 08.30 - 08.45

Giuffrè M.*, Benigni M.S., Coltella M., Martelli L., Pietrosante A. & Romani M.: Seismic microzonation and analysis of the Emergency Limit Condition - Useful tools for the seismic risk mitigation

25-2 08.45 - 09.15

[KEYNOTE] Marzocchi W.*, Falcone G. & Taroni M.: Progresses and challenges for Operational Earthquake Forecasting in Italy

25-3 09.15 - 09.30

Fiorucci F.*, Ardizzone F., Santangelo M., Bucci F., Allasia P., Alvioli M., Baldo M., Bianchi C., Brunetti M.T., Cavalli M., Clerissi F., Crema S., Donnini M., Giordan D., Guzzetti F., Marchesini I., Marchi L., Melillo M., Mondini A.C., Peruccacci S., Reichenbach P., Rossi M., Salvati P. & Cardinali M.: The 2016 Central Italy Seismic Sequence: emergency and post-emergency activities

25-4 09.30 - 09.45

Peruccacci S.*, Brunetti M.T., Gariano S.L., Melillo M., Rossi M. & Guzzetti F.: National and regional empirical rainfall thresholds for possible shallow landslide occurrence in Italy

25-5 09.45 - 10.00

Buondonno E., Cubellis E.*, Delizia I., Luongo G. & Ricci F.: Ischia Island: a model for sustainable development and natural risk mitigation

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S30. LEGACY AND NEW APPLICATIONS OF STABLE-ISOTOPE GEOCHEMISTRY

Conveners and Chairpersons Riccardo Petrini (UNIFI), Lisa Ghezzi (UNIFI), Maddalena Pennisi (IGG-CNR, Pisa)

Sala Congressi

30-1 08.30 - 09.00

[KEYNOTE] Rodushkin I.*, Pallavicin N. & Engström E.: Novel application of MC-ICP-MS for stable isotope measurements

30-2 09.00 - 09.15

Varrica D.*, Tamburo E., Alaimo M.G., Losno R. & Monna F.: Use of lead isotopic fingerprint in human scalp hair to identify potential sources of pollution in industrial Sicilian sites (Italy)

30-3 09.15 - 09.30

Dordoni M., Pennisi M.*, Agostini S., Dini A., Di Giuseppe P., Rielli A., Provenzale A., Bianchini G., Natali C., Marchina C. & Cidu R.: First isotopic analyses in fluid samples using MC-ICP-MS (NEPTUNE PLUS™): results on Boron-poor fluvial and rain water (Adige basin)

30-4 09.30 - 09.45

[KEYNOTE] Regattieri E.*, Zanchetta G., Drysdale R.N., Giaccio B., Isola I., Mannella G., Nomade S. & Hellstrom J.C.: Hydrological significance of $\delta^{18}\text{O}$ composition of speleothems and lakes carbonates from Apennine sites (Italy): a coherent hydrological framework for the Last Interglacial period

30-5 09.45 - 10.00

Cavazzini G.*: Inter-measurement determination of the isotopic composition of Sr (II)

GIOVEDÌ 19 Settembre 2019 [08.30-10.30]

S32. NEW DEVELOPMENTS AND CHALLENGES IN VOLCANOLOGY: INSIGHTS FROM EXPERIMENTAL, ANALYTICAL AND FIELD STUDIES

Conveners and Chairpersons: Alessandro Vona (UNIROMA3), Laura Spina (INGV, Roma), Daniele Morgavi (UNIPG), Stefania Sicola (UNIROMA3), Eugenio Nicotra (UNICAL)

Aula N

32-1 08.30 - 09.00

[KEYNOTE] Del Bello E.*, Taddeucci J. & Scarlato P.: Investigating the behaviour of volcanic ash using controlled laboratory experiments

32-2 09.00 - 09.15

Spina L.*, Morgavi D., Cannata A. & Perugini D.: Experimental investigations on degassing behavior and related seismo-acoustic markers: the effect of complex conduit geometries

32-3 09.15 - 09.30

Kazarian A.*, Cáceres F., Scheu B., Vona A., Misiti V., Dingwell D.B. & Romano C.: An experimental overview on the role of decompression on bubble formation in trachytic magma

32-4 09.30 - 09.45

Frontoni A.*, Vona A., Giordano G., Viccaro M. & Romano C.: Clastogenic lava flow: the case study from Mount Etna

32-5 09.45 - 10.00

Pisello A.*, Vetere F.P., Murri M., Alvaro M., Rossi S., Holtz F. & Perugini D.: Viscosity of ultramafic melts during cooling: insights for emplacement of Martian lava flows

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

S4. MINERALS, ENVIRONMENT AND MEDICAL USES

Conveners and Chairpersons: Claudia Belviso (CNR-IMAA, Matera), Giovanni Grieco (UNIMI), Pietro Marescotti (UNIGE)

Aula R

4-6 11.30 - 11.45

Beltrami G.*, Martucci A., Pasti L. & Chenet T.: Probing the sorption capacity of Y Zeolite towards pharmaceutical compounds: a neutron powder diffraction study

4-7 11.45 - 12.00

Valdrè G.*, Moro D. & Ulian G.: Amino acids-chlorite interaction at the nano-atomic scale

4-8 12.00 - 12.15

Grieco G.*, Sinojmeri A. & Cavallo A.: Pyrite separation in copper enrichment plants as a key to circular economy driven remediation: a case study from Northern Albania Cu mining district

4-9 12.15 - 12.30

Parisi F.*, Sciascia L., Princivalle F., Merli M., Lazzara G. & Milioto S.: Montmorillonite clay for the removal and recovery of metals and dyes from industrial wastewaters

4-10 12.30 - 12.45

Pastero L.*, Curetti N., Ortenzi M.A., Schiavoni M., Destefanis E. & Pavese A.: Non-conventional CCS reaction: Ca-oxalate precipitation via Vitamin C promoted green reaction

4-11 12.45 - 13.00

Placitu S., Fancello D.*, Medas D., Alisi C., Paganin P., Tasso F., Sprocati A.R., Turnau K. & De Giudici G.: Mineral dissolution enhanced by bacteria can improve sustainability of agricultural practices

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

S5. GEOSCIENCES IN ARCHAEOOMETRY AND CULTURAL HERITAGE CONSERVATION

Conveners and Chairpersons: Marco Benvenuti (UNIFI), Anna Maria De Francesco (UNICAL), Claudio Mazzoli (UNIPD)

Aula L

5-6 11.30 - 12.00

[KEYNOTE] Di Fazio M.*, Felici A.C., Catalli F., Doménech-Carbó A., Doménech-Carbó M.T. & De Vito C.: Roman orichalcum coins: a deep investigation from patina to core

5-7 12.00 - 12.15

Bernabale M.*, Nigro L. & De Vito C.: Microstructure and chemical composition of Iron Age archaeological objects from the Phoenician-Punic site of Motya (Sicily, Italy)

5-8 12.15 - 12.30

Borghi A.*, d'Atri A., Gambino F., Martire L., Perotti L., Vaggelli G. & Valentino D.: STONE Pietre Egizie: a free mobile application for promoting the knowledge and dissemination of ornamental stones exposed in Museo Egizio of Torino (NW Italy)

5-9 12.30 - 12.45

Medeghini L., Botticelli M.*, De Vito C., Nigro L. & Mignardi S.: Archaeometric analysis on ceramic material from the Khalet al-Jam'a necropolis (Bethlehem, West Bank)

5-10 12.45 - 13.00

Paris E.*, Sciarroni G., Virgili S., Abudurehman A. & Antongirolami V.: A newly discovered ceramic production center in Camerino (Marche, Italy)

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

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Aula M

7-7 11.30 - 11.45

Cesare B.*, Nestola F., Mugnaioli E., Della Ventura G., Peruzzo L., Bartoli O., Viti C., Johnson T. & Erickson T.: I was not born cubic, said low-temperature metamorphic garnet

7-8 11.45 - 12.00

Angel R.J.*, Murri M., Prencipe M., Stangarone C., Mihailova B.D. & Alvaro M.: Measuring strains with Raman Spectroscopy

7-9 12.00 - 12.15

Gilio M.*, Alvaro M., Angel R.J. & Scambelluri M.: Elastic geothermobarometry on multiple inclusions in a single host

7-10 12.15 - 12.30

Mazzucchelli M.L.*, Angel R.J., Morganti S. & M. Alvaro M.: EntraPT: a GUI program for anisotropic elastic thermobarometry

7-11 12.30 - 12.45

[KEYNOTE] Mitterpergher S.*: From aseismic to seismic slip in exhumed seismogenic sources: insights from geochemical and microstructural studies of pseudotachylyte bearing faults in the Adamello massif

7-12 12.45 - 13.00

Corti L.*, Visalli R., Zucali M., Mancini L. & Sayab M.: Integrating X-ray microtomography with the chemical imaging of EMPA: a robust method to quantify mineral re-crystallization during metamorphism: example for granulite to eclogite in the Western Alps, Italy

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S16. PLANETARY EVOLUTION: NEW INSIGHTS FROM REMOTE SENSING, *IN-SITU*, TERRESTRIAL ANALOGUES AND METEORITE STUDIES

Conveners and Chairpersons: Maria Sgavetti (UNIPR), Mara Murri (UNIPV), Valentina Galluzzi (IAPS-INAF), Riccardo Pozzobon (UNIPD), Cristian Carli (IAPS-INAF, Roma)

Aula Q

16-6 11.30 - 12.00

[KEYNOTE] Folco L.*: The near-Earth cosmic dust complex: perspectives from the unique Transantarctic Mountains micrometeorite collection

16-7 12.00 - 12.15

Moggi Cecchi V.*, Pratesi G., Giuli G., Nemati M., Di Martino M. & Serra R.: The 2017 Joint Italian - Iranian Lut desert expedition: compositional and textural features of the meteorites recovered

16-8 12.15 - 12.30

Nazzareni S.*, Pauselli C., Skogby H., Murri M., Domeneghetti M.C., Alvaro M., Stalder R., Petrelli M., De Sanctis M.C., Formisano M. & Federico C.: Pyroxenes as a proxy for thermal history and water content of asteroid 4 Vesta

16-9 12.30 - 12.45

Nestola F., Barbaro A.*, Morana M., Christ O., Brenker F.E., Domeneghetti M.C., Dalconi M.C., Alvaro M., Goodrich C., Fioretti A.M., Leoni M. & Shaddad M.H.: Diamonds in ureilites: how did they form?

16-10 12.45 - 13.00

Nava J.*, Maturilli A., Zambon F., Carli C., Alemanno G., Helbert J., Genovesi S. & Massironi M.: Laboratory experiments on carbonaceous chondrites: insights into cryovolcanism and hydrothermal alteration on planetary bodies

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

S22. FROM SEISMIC SOURCE TO FAULT USING MULTIDISCIPLINARY APPROACHES: THE CENTRAL AND SOUTHERN APENNINES AS NATURAL LABORATORY

Conveners and Chairpersons: Massimiliano Porreca (UNIPG), Debora Presti (UNIME), Rita de Nardis (UNICH)

Aula D

22-7 11.30 - 11.45

(Invited) Brozzetti F.*, Mondini A.C., Pauselli C., Mancinelli P., Cirillo D., Guzzetti F. & Lavecchia G.: Mainshock anticipated by intra-sequence ground deformations: insights from multiscale field and SAR interferometric measurements

22-8 11.45 - 12.00

Buttinelli M.*, Petracchini L., Maesano F.E., Scrocca D., D'Ambrogi C., Di Bucci D., Marino M., Capotorti F., Cavinato G., Bigi S. & RETRACE-3D working group 1,2,3,4: The impact of high structural complexity on seismotectonics: hints and lessons learned in the areas of the 2016-2018 central Italy seismic sequence in the framework of the RETRACE-3D project

22-9 12.00 - 12.15

Puliti I.*, Pizzi A., Benedetti L., Di Domenica A. & Fleury J.: Evolution of an active fault system in an extensional context: the case of the Mt. Vettore system in the central Apennines and insights in its segmentation pattern

22-10 12.15 - 12.30

Villani F.*, Maraio S., Bruno P.P., Improta L., Wood K., Civico R., Baccheschi P., Sapia V., Pucci S., Brunori C.A., De Martini P.M., Pantosti P.M., Conti P. & Doglioni C.: High-resolution seismic profiling in the Castelluccio basin: new constraints on the shallow subsurface of the 30 October 2016 Mw 6.5 Norcia earthquake fault (central Italy)

22-11 12.30 - 12.45

de Nardis R., Pandolfi C.*, Monachesi G., Cattaneo M., Marzorati S., Cirillo D., Ferrarini F., Brozzetti F. & Lavecchia G.: High-sampling of multi-layered crust-scale seismogenic deformation in Central-Eastern Italy

22-12 12.45 - 13.00

Lavecchia G.*, de Nardis R., Pandolfi C., Monachesi G., Cattaneo M., Marzorati S., Cirillo D., Ferrarini F. & Brozzetti F.: Three-dimensional pattern of lithospheric compression in central Italy - Geodynamic implication

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S25. GEOSCIENCES FOR DISASTER RISK REDUCTION: PROBLEMS, SOLUTIONS AND PERSPECTIVE

Conveners and Chairpersons: Fausto Guzzetti (CNR IRPI, Perugia), Warner Marzocchi (UNINA)

Aula A

25-6 11.30 - 11.45

Cappello A.*, Ganci G., Bilotta G., Corradino C., Héroult A. & Del Negro C.: Assessing lava flow risk at Etna volcano

25-7 11.45 - 12.15

[KEYNOTE] Rossi M.*, Guzzetti F., Salvati P., Donnini M., Napolitano E. & Bianchi C.: Modelling societal landslide risk in Italy

25-8 12.15 - 12.30

Gioia E.* & Marincioni F.: Analyzing flood risk perception to connect forecasting and alert agencies with the community: the case of the life primes project

25-9 12.30 - 12.45

Pepe A.*, Zhao Q., Kubanek J., Falabella F., Yin J., Yu D., Lin N., Ma G. & Liu M.: Differential synthetic aperture radar experiments over the Ocean-Reclaimed lands of Shanghai: long-term flood hazard modeling and urban infrastructure monitoring

25-10 12.45 - 13.00

Versace P.*, Capparelli G., Biondi D., Cruscomagno F., Vacha D. & Galasso L.: People's vulnerability to floods: the EVIL model

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

S32. NEW DEVELOPMENTS AND CHALLENGES IN VOLCANOLOGY: INSIGHTS FROM EXPERIMENTAL, ANALYTICAL AND FIELD STUDIES

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Aula N

32-6 11.30 - 11.45

[KEYNOTE] González-García D.*, Petrelli M., Behrens H., Vetere F., Morgavi D., Giordano D. & Perugini D.: Diffusive fractionation of trace elements between mixing melts: the experimental approach

32-7 11.45 - 12.00

Rossi S.*, Petrelli M., Morgavi D., Vetere F.P., Almeev R.R., Astbury R.L. & Perugini D.: Role of magma mixing in the pre-eruptive dynamics of the Aeolian Islands volcanoes (Southern Tyrrhenian Sea, Italy)

32-8 12.00 - 12.15

Di Salvo S.*, Avanzinelli R., Isaia R., Druitt T.H. & Francalanci L.: The role of new magma recharges and crystal-mush interaction in the Campanian Ignimbrite activity, revealed by geochemical and isotope micro-analyses

32-9 12.15 - 12.30

Monaco L.*, Giaccio B., Palladino D.M., Gaeta M., Sottili G., Marra F., Castorina F., Nomade S., Pereira A. & Albert P.G.: Early explosive activity at Vico volcano, central Italy: a new perspective from proximal and distal sedimentary archives

32-10 12.30 - 13.00

[KEYNOTE] Petrelli M.* & Zellmer G.: Volcanic plumbing system dynamics: unravelling rates and timescales of magma transfer, storage, and eruption

GIOVEDÌ 19 Settembre 2019 [11.30-13.00]

S33. GEOSCIENCES AT SCHOOL 2019

Conveners and Chairpersons: Elena Bonaccorsi (UNIFI), Francesca Cifelli (UNIROMA3), Rosolino Cirrincione (UNICT), Eleonora Paris (UNICAM), Manuela Pelfini (UNIMI)

Sala Congressi

33-1 11.30 - 11.45

Lozar F.* & Tonon M.D.: Climate education in the deep time perspective: working with teachers and students

33-2 11.45 - 12.00

Occhipinti S.*: A PBL approach to enhance the sensitivity of students towards natural risks and hazards, in Italian schools

33-3 12.00 - 12.15

Piangiamore G.L.*, Trolese P., Frione A. & Cortopassi P.: Social Emotional Learning (SEL) and earthquake: teaching through emotions meets Geoscience

33-4 12.15 - 12.30

Scopesi C.*, Belmonte D., Briguglio A., Cabella R., Carbone C., Forchielli A. & Doria G.: Geosciences and museum: new frontiers in didactic for high school students

33-5 12.30 - 12.45

Seno S.* & Lupi C.: Geoscience laboratory for primary school: an attempt for engaging young people in Earth Sciences

33-6 12.45 - 13.00

Tonon M.D.* & Caretto A.: The aesthetic approach to teaching geosciences and sustainable education

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S4. MINERALS, ENVIRONMENT AND MEDICAL USES

Conveners and Chairpersons: Claudia Belviso (CNR-IMAA, Matera), Giovanni Grieco (UNIMI), Pietro Marescotti (UNIGE)

Aula R

4-12 15.30 - 15.45

Medas D.*, Carlomagno I., Meneghini C., Pusceddu C. & De Giudici G.: Laboratory and synchrotron radiation-based techniques to investigate the soil-plant system in Zn-extreme environments

4-13 15.45 - 16.00

Chilleri E., Byrne P., Onnis P., Lattanzi P.*, Costagliola P., Rimondi V.: Trace metal contents and mobility in mine wastes of the Central Wales mine district: environmental implications

4-14 16.00 - 16.15

Rigonat N.*, De Giudici G., Medas D., Cidu R., Lattanzi P., Podda F., Dore E., Frau F., Marras P.A. & Frau I.: Assessment of environmental impact of mine drainage on the Rio Montevecchio watershed (SW-Sardinia) through hydrologic-tracer techniques and environmental mineralogy

4-15 16.15 - 16.30

Mousavi Aghdam M., Loi A., Dentoni V., Meloni M.A., Pistis M., Funedda A., Randaccio P. & Da Pelo S.*: Can be geogenic radon potential indirectly inferred?

4-16 16.30 - 16.45

Sacchi E.*: Facies analysis at the crime scene: a traditional method in a different frame

4-17 16.45 - 17.00

Somma R.*: The judicial contribution of the Messina University on Forensic Geology and Environmental Crimes

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S5. GEOSCIENCES IN ARCHAEOOMETRY AND CULTURAL HERITAGE CONSERVATION

Conveners and Chairpersons: Marco Benvenuti (UNIFI), Anna Maria De Francesco (UNICAL), Claudio Mazzoli (UNIPD)

Aula L

5-11 15.30 - 16.00

[KEYNOTE] Moro D.*, Ulian G. & Valdrè G.: Monte Carlo SEM-EDS micro- and nanoanalysis in archaeometry and cultural heritage: thickness, shape/geometry effects and measurement strategy

5-12 16.00 - 16.15

Stroscio A.*, Coccato A., Fugazzotto M., Occhipinti R., Mazzoleni P. & Barone G.: Potentiality of PXRF for the discrimination of altered carbonate rocks in Cultural Heritage

5-13 16.15 - 16.30

Pellegrini M.*, Donahue R.E. & Lee-Thorp J.A.: Tracking animal movements with tooth enamel oxygen and strontium isotopes

5-14 16.30 - 16.45

Caruso V.*, Marinoni N., Merlini M., Cantaluppi M., Diella V., Trombino L. & Cattaneo C.: A comparison between the decay of adult and juvenile human skeletons from archeological and contemporary burials using a multidisciplinary approach

5-15 16.45 - 17.00

Coletti C.*, Maritan L. & Mazzoli C.: "Our Common Future": a lesson from the past for a renewed responsibility

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S6. EXPERIMENTAL AND THEORETICAL STUDIES OF MAGMATIC PROCESSES

Conveners and Chairpersons: Michael R. Carroll (UNICAM), Fabio Arzilli (Univ. Manchester, UK), Paola Stabile (UNICAM)

Aula D

6-1 15.30 - 15.45

[KEYNOTE] Di Genova D.*: Volcanic eruptions: a nanoscale perspective

6-2 15.45 - 16.00

Buttitta D.*, Caracausi A., Giannandrea P., Paternoster M., Rizzo A.L. & Rizzo G.: Diffusive fractionation of helium isotopes as a possible process to explain the mantle source feature beneath Mount Vulture volcano (Italy)

6-3 16.00 - 16.15

Casiraghi G.*, Schiavi F., Fumagalli P., Cannà E. & Tiepolo M.: The effect of chlorine on the incorporation of water in magmatic amphibole in subduction settings: an experimental study at lower crust conditions

6-4 16.15 - 16.30

Giuliani L.*, Iezzi G., Davis M., Hippeli T., Vetere F., Elbrecht A.L., Nazzari M., Mollo S. & Scarlato P.: Onset of crystallization in a cooling MORB: an *in-situ* DSC investigation

6-5 16.30 - 16.45

Romano P.*, White J.C., Andujar J., Scaillet B., Di Carlo I., Liotta M. & Rotolo S.G.: Experimental and thermodynamic constraints on mineral equilibria in pantelleritic magmas

6-6 16.45 - 17.00

Spartà D.*, Fumagalli P., Merlini M., Borghini G. & Poli S.: Phase relations in hydrous REE-bearing carbonatite at 1 GPa, 700-1000°C

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S15. GEOBIOLOGY: BIOSPHERE-EARTH INTERACTIONS

Conveners and Chairpersons: Roberto Barbieri (UNIBO), Cesare Corselli (UNIMIB)

Aula N

15-1 15.30 - 15.45

Vertino A.*, Savini A. & Marchese F.: Bio-geosphere interactions in the deep: The important role of cold-water corals

15-2 15.45 - 16.00

Azzarone M., Cheli A., Mancuso A., Stagioni M., Falini G., Goffredo S. & Scarponi D.*: *Chamelea gallina* response to a warming Earth: A case study from the Holocene sedimentary succession of the Po-Adriatic system

15-3 16.00 - 16.15

Berton D., Rodriguez Navarro A., Grenier Romero C., Roman Martinez R., Rodeghero E.* & Martucci A.: The precipitation process of the calcium carbonate in *Austromegabalanus Psittacus* and the role of organic matter: a multidisciplinary study

15-4 16.15 - 16.30

Bracchi V.A.* & Basso D.: Crustose coralline algae: the bioengineers of Mediterranean seafloor at the geological scale

15-5 16.30 - 16.45

Bonacina G.*, Sanfilippo A., Previde Massara E., Scotti P., Viaggi P. & Piva A.: The Cretaceous Oceanic Anoxic Event 2: geochemical constraints from a section of the Atlantic margin

15-6 16.45 - 17.00

Consani S.*, Borello A., Vezzulli L. & Carbone C.: Characterisation of prokaryotes and eukaryotes in contaminated extreme environments: preliminary results

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S16. PLANETARY EVOLUTION: NEW INSIGHTS FROM REMOTE SENSING, *IN-SITU*, TERRESTRIAL ANALOGUES AND METEORITE STUDIES

Conveners and Chairpersons: Maria Sgavetti (UNIPR), Mara Murri (UNIPV), Valentina Galluzzi (IAPS-INAF, Roma), Riccardo Pozzobon (UNIPD), Cristian Carli (IAPS-INAF, Roma)

Aula Q

16-11 15.30 - 15.45

Suttle M.D.*, Twegar K., Nava J., Spiess R., Spratt J., Campanale F. & Folco L.: A unique CO-like micrometeorite hosting an exotic Al-Cu-Fe-bearing assemblage - close affinities with the Khatyrka meteorite

16-12 15.45 - 16.00

Campanale F.*, Mugnaioli E., Folco L., Gemmi M., Lee M.R., Daly L. & Glass B.P.: Evidence for direct solid-state quartz-to-coesite transformation in shocked ejecta from the Australasian tektite/microtektite strewn field

16-13 16.00 - 16.15

(Invited) Miozzi F.*, Morard G., Antonangeli D., Clark A.N., Baron M.A., Dorn C., Rozel A., Pakhomova A., Mezouar M. & Fiquet G.: Characterization of the Fe-Si-C system at extreme conditions and application to exoplanets interior

16-14 16.15 - 16.30

Mugnaioli E.*, Gemmi M., Campanale F., Suttle M.D., Folco L. & Pignatelli I.: 3D electron diffraction for the characterization of cryptocrystalline micro-samples: applications to planetary sciences

16-15 16.30 - 16.45

Fastelli M.*, Comodi P., Zucchini A., Maturilli A., Balic-Zunic T. & Rossi M.: Reflectance and emissivity spectroscopy of hydrated salts at different temperature: a method to understand icy planetary bodies surfaces composition

16-16 16.45 - 17.00

Pisello A.*, De Angelis S., Ferrari M., Vetere F.P., Pauselli C., Kueppers U., De Sanctis M.C. & Perugini D.: A new spectroscopic database for silicate glasses: implications for planetary science

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S25. GEOSCIENCES FOR DISASTER RISK REDUCTION: PROBLEMS, SOLUTIONS AND PERSPECTIVE

Conveners and Chairpersons: Fausto Guzzetti (CNR IRPI, Perugia), Warner Marzocchi (UNINA)

Aula A

25-11 15.30 - 15.45

Gioia E.* & Marincioni F.: A comparison between empirical landslide predictive models applied to the Marche region (Central Italy)

25-12 15.45 - 16.15

[KEYNOTE] Meletti C.*, Marzocchi W., D'Amico V., Luzi L., Martinelli F., Pace B., Rovida A., Visini F. & MPS16 Working Group: MPS19: the updated seismic hazard model of Italy as an example of state-of-the-art in PSHA

25-13 16.15 - 16.30

Allasia P.*, Godone D., Wrzesniak A., Notti D., Baldo M., Faccini F., Elter F.M. & Poggi F.: The importance of integrated monitoring approach: the case study of Arzeno (Graveglia Valley - Ligurian Apennine, Italy)

25-14 16.30 - 16.45

Marchesini I.*, Salvati P., Rossi M., Donnini M., Guzzetti F., Sterlacchini S., Zazzeri M., Cappellini G. & Voltolina D.: A statistical procedure used for the flood hazard zonation at national scale

25-15 16.45 - 17.00

Sterlacchini S.*, Zazzeri M., Cappellini G., Voltolina D., Marchesini I., Salvati P., Rossi M., Donnini M. & Guzzetti F.: A GIS-based application to support decision makers in preparedness and response to flood-related risks

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S27. GEOLOGIC AND GEOTHEMATIC MAPPING IN A DYNAMIC COUNTRY: MAPS, DATABASE AND DATA DISSEMINATION

Conveners and Chairpersons: Fabrizio Berra (UNIMI), Chiara D'Ambrogi (ISPRA Roma)

Aula M

27-1 15.30 - 15.45

Montepeloso M., Zanchetta S.*, Berio L. & Zanchi A.: Geological-Structural map of the Late Carboniferous - Early Permian Orobic basin in the upper Brembana Valley (Orobic Alps, N Italy)

27-2 15.45 - 16.00

Funari V., Rizzieri A.* & Dinelli E.: SuoliBo-HD: preliminary results of the high-density magnetic mapping of the Bologna topsoils from the public green and other outcropping urban soils

27-3 16.00 - 16.15

Berti D.*, Basi M., Bonomo R., Marino M., Pampaloni M.L., Ricci V., Rossi M., Silvestri S. & Urbani A.: Geological mapping and first level seismic microzonation in Abruzzo: case studies in the Aventino basin (southern Abruzzo)

27-4 16.15 - 16.30

Conti P.*, Cornamusini G. & Carmignani L.: Geological map of the Italian Northern Apennines (Emilia-Romagna, Marche, Tuscany, Umbria regions) at 1:250.000 scale, with GIS vector data

27-5 16.30 - 16.45

Carta R.*, Muraro C., Bonomo R., D'Angelo S., Martarelli L., Papasodaro F., Ricci V. & Vita L.: The Lithological Database of the CARG Project

27-6 16.45 - 17.00

Vennari C., Casarano D.*, Marchesini I., Salvati P., Parise M. & Lollino P.: A regional geodatabase on landslide, flood and sinkholes for civil protection application **CONTRIBUTO PRESENTATO COME POSTER CON VARIAZIONE PRESENTING AUTHOR.**

27-7 16.45 - 17.00 d'Atri A.*, Barale L., Borghi A., Dino G., FaveroLongo S.E., Gambino F., Giardino M., Lombardo V., Martire L., Perotti L. & Piana F.: The Piemonte Ornamental Stones geodatabase compliant with the "GeoPiemonte Map" web-GIS service **SOSTITUZIONE 27-6 (ORALE)**

GIOVEDÌ 19 Settembre 2019 [15.30-17.30]

S33. GEOSCIENCES AT SCHOOL 2019

Conveners and Chairpersons: Elena Bonaccorsi (UNIFI), Francesca Cifelli (UNIROMA3), Rosolino Cirrincione (UNICT), Eleonora Paris (UNICAM), Manuela Pelfini (UNIMI)

Sala Congressi

33-7 15.30 - 15.45

Beccaceci A.*, Stacchiotti L. & Paris E.: Sustainable city: work together for a more sustainable life style

33-8 15.45 - 16.00

Boniello A.* & Paris E.: The virtual trip of Darwin, the geologist

33-9 16.00 - 16.15

Borghini A.*, Pieraccioni F., Gioncada A. & Bonaccorsi E.: What are the students' mental models of the Earth's inner structure?

33-10 16.15 - 16.30

Moroni B.*: "HAVE YOU GOT A GREEN THUMB?" Hands-on experiences of kids' and teens' earth science education by inquiry-based methods

33-11 16.30 - 16.45

Occhioni M.*: Earth Science in Opensim-based virtual worlds

33-12 16.45 - 17.00

Realdon G.* & Gravina T.: New opportunities for teacher professional development in Earth sciences: EGU Geoscience Fieldwork Officers Project

- 5-16 Fioretti G.* & Campobasso C.: Petroarchaeometric investigation of building stones and mensiochronological analysis of masonry structures of the St. Maria Veterana archaeological site in Triggiano (Apulia, southern Italy), as multidisciplinary tool for the chronological dating and traditional production technology studies
- 5-17 Germinario C., Cappelletti P., De Bonis A., Di Martire D., Esposito R., Grifa C., Morra V., Rispoli C.* & Talamo P.: The Roman villa at the Castle of Baia (Naples, Italy): preliminary investigations on the polychromy of frescoed surfaces by using non-destructive spectroscopic techniques
- 6-7 Stabile P.*, Arzilli F., Paris E. & Carroll M.R.: Role of the kinetics of nucleation and crystal growth of alkali feldspar in a peralkaline pantelleritic melt
- 6-8 Fanara S.*, Schmidt B.C, Sottili G. & Palladino D.M.: Phase equilibria experiments on a leucite from the Colli Albani volcanic district (Italy)
- 7-13 Giuli G.*, Pratesi G., Radica F., Stabile P., Paris E. & Cibin G.: Iron oxidation state in Fulgurite glass
- 7-14 Malaspina N.*, Langenhorst F. & Montanini A.: The oxidation state of C-S-bearing garnet clinopyroxenites from External Liguride (Italy) and Beni Bousera (Morocco): a TEM-EELS study
- 15-7 Bragato P.L.*: Human and geological crises of the last millennium in Italy modulated by the episodes of the Little Ice Age
- 15-8 Leonelli G.*, Pelfini M. & Maggi V.: Changes in the tree-ring $\delta^{18}\text{O}$ from the Forni Glacier forefield due to glacier stream water inputs and climate change: potential use for environmental and climatic reconstructions
- 16-17 Carli C.*, Morlok A., Stojic A., Weber I., Renggli C., Klemme S., Ferrari S., Pratesi G., Hiesinger H. & Capaccioni F.: VNIR reflectance spectra of iron-bearing Mercury-like glasses
- 16-18 Tangari A.C.*, Marinangeli L., Scarciglia F., Pompilio L. & Piluso E.: Genesis and age of clay deposits in Margaritifer Region on Mars using terrestrial soil analogues
- 22-13 Cortinovis S.*, Balsamo F., Fondriest M., La Valle F. & Di Toro G.: Structural architecture and microstructural properties of the seismogenic Monte Marine fault zone, central Apennines (Italy)
- 25-16 Grezio A.*, Ardizzone F., Bucci F., Guzzetti F. & Marzocchi W.: Seismic- and Meteo-induced Landslides in Emilia Romagna
- 27-7 d'Atri A.*, Barale L., Borghi A., Dino G., FaveroLongo S.E., Gambino F., Giardino M., Lombardo V., Martire L., Perotti L. & Piana F.: The Piemonte Ornamental Stones geodatabase compliant with the "GeoPiemonte Map" web-GIS service **VARIAZIONE.**
SPOSTATA A ORALE
- 32-11 Cubellis E., Pappalardo L.* & Petrosino P.: Eruptive dynamics during violent strombolian Vesuvius 1906 eruption

S4. MINERALS, ENVIRONMENT AND MEDICAL USES

4-18 Pannello 1

Belviso C.*, Belviso S., Ragone P. & Cavalcante F.: Red mud neutralization by layered double hydroxides (LDHs) formation: differences in the synthesis process used

4-19 Pannello 2

Botta S.*, Avataneo C., Barale L., Compagnoni R., Cossio R., Marcelli I., Piana F., Tallone S. & Turci F.: Petrofacies for the prediction of NOA content in rocks: application to the “Gronda di Genova” tunneling project

4-20 Pannello 3

D’Aleo R.*, Cangemi M., Speziale S., Garabeiti E., Madonia P. & Favara R.: Ash leachates from Yasur volcano (Vanuatu): human and livestock health assessment implications

4-21 Pannello 4

Fornasaro S., Comodi P., Crispini L., Malatesta C.*, Zucchini A. & Marescotti P.: Distribution and concentration of potentially toxic elements in ultramafic rocks: a case study from the Voltri Massif (Western Alps, Italy)

4-22 Pannello 5

Funari V.*, Toller S. & Costa A.: Human Health vs. Urban Geochemistry during the Anthropic Times

4-23 Pannello 6

Giordani M.*, Di Lorenzo F., Mattioli M. & Churakov S.: Solubility Assay of the Natural Zeolites Erionite, Offretite and Stellerite

4-24 Pannello 7

Lettino A., Belviso C., Cavalcante F.* & Fiore S.: Potential Environmental risk induced by TiO₂ dispersions in waters and sediments: a case history of the Frido stream deposits (Southern Apennines, Italy)

4-25 Pannello 8

Mattioli M.*, Giordani M., Ottaviani M.F., Cangiotti M., Valentini L., Di Giuseppe D. & Gualtieri A.F.: Fibrous ferrierite from the Lessini Mounts, Veneto Volcanic Province, NE Italy

4-26 Pannello 9

Moro D.*, Ulian G. & Valdrè G.: Mechanical properties of calcium apatite-based biominerals: hydroxylapatite (*P6₃*) and type-A carbonated apatite (*P1*)

4-27 Pannello 10

Rizzo G.* & Sinisi R.: Mineralogical and petrographical assessment of edenite crystals from Southern Apennine (Italy)

4-28 Pannello 11

Sacchi E.*: Unusual (but not too much) particles in forensic soil samples

4-29 Pannello 12

Smiljanić D.*, Daković A., de Gennaro B., Germinario C., Grifa C., Izzo F., Langella A., Spasojević M. & Mercurio M.: Novel zeolite’s nanocomposites with a two-tailed cationic surfactant - Arquad® 2HT-75 with increased stability

4-30 Pannello 13

Tribaudino M.*, Mantovani L., Solzi M. & Zaccara P.: Environmental monitoring with magnetic minerals on leaves in wintertime: an assessment

S5. GEOSCIENCES IN ARCHAEOMETRY AND CULTURAL HERITAGE CONSERVATION

5-18 Pannello 14

Beltrame C., Lazzarini L. & Antonelli F.*: The marble identification of ancient shipwrecks for an enhancement of the *in situ* underwater heritage of Italy: the case of the cargo of Punta del Francese (Stintino-Sassari, Sardinia)

5-19 Pannello 15

Castagnotto E.*, Locardi F., Scrivano S., Ferretti M. & Gaggero L.: Chemical and textural fingerprint of natural stones for the use of construction and restoration stakeholders (CatSTONE project)

5-20 Pannello 16

De Francesco A.M., Barca D.*, Tucci A. & Scarpelli R.: Provenance study of the protohistoric impasto *pithoi* in the Soverato area (Calabria - Southern Italy) by LA-ICP-MS analysis of individual biotite grains

5-21 Pannello 17

Fratini F., Pecchioni E.*, Cantisani E. & Rescic S.: Pistoia, city of stones

5-22 Pannello 18

Manca R.*, Scrivano S., Manfriani C., Ager Vázquez F.J., Ortega Feliu I., Respaldiza M.A. & Benvenuti M.: Castellani gold jewels: materials characterization by *in-situ*, non invasive analyses at the Museo di Villa Giulia (Rome)

5-23 Pannello 19

Muntoni I.M., Torre M. & Eramo G.*: Setting the technological patterns in the Neolithic pottery production of central Apulia

5-24 Pannello 20

Pancani D.*, Raneri S. & Gioncada A.: Mineralogical and petrographic evidences of fires at Pisa Cathedral: the case of Panchina Livornese

5-25 Pannello 21

Precisvalle N., Ardit M.*, Martucci A., Bonadiman C., Bianchini G. & Natali C.: Macedonian ruby: mineralogical and geochemical analysis of a national treasure

5-26 Pannello 22

Savelli C.*: Olduvai Subchron (Pliocene-Pleistocene Transition) In Tyrrhenian Sea and Africa Rift Valley: geological and paleoanthropological implications **CANCELLATO**

5-27 Pannello 23

Scrivano S.*, Gambino F., Borghi S., Cabella R. & Giannattasio B.M.: Archaeometric contribution to the study of the Small Thermal Baths in the roman town of Nora (Sardinia): white and coloured marbles

5-28 Pannello 24

Testone V., Longo V., Mameli P.*, Cherchi M. & Milanese M.: Detection of graves and buried walls using ground penetrating radar: the Sant'Antioco di Bisarcio archaeological site (Sardinia)

5-29 Pannello 25

Tonelli G.*, Renzulli A., Santi P., Talozzi D., Tramontana M. & Veneri F.: The bricks of the UNESCO historical town of Urbino (Marche, Italy): characterization, provenance of the raw material and archaeometric dating

5-30 Pannello 26

Vettori S., Verrucchi M., Di Benedetto F.*, Gioventù E., Benvenuti M., Pecchioni E., Costagliola P. & Moretti S.: Hyperspectral sensor: a practice tool to evaluate the efficacy of cleaning procedures

S6. EXPERIMENTAL AND THEORETICAL STUDIES OF MAGMATIC PROCESSES

6-9 Pannello 27

Arzilli F.*, La Spina G., Burton M.R., Polacci M., Le Gall N., Hartley M., Di Genova D., Cai B., Vo N., Bamber E., Nonni S., Atwood R., Llewellyn E., Heidy M., Brooker R.A. & Lee P.: Highly explosive basaltic eruptions: magma fragmentation induced by rapid crystallisation

6-10 Pannello 28

Buono G., Di Genova D., Fanara S., Palladino D.M., Pappalardo L.*, Petrosino P., Schmidt B.C. & Sottili G.: The effect of decompression rate and volatile (H₂O - CO₂) content on degassing of trachytic melts

6-11 Pannello 29

Cariddi B.*, Costamagna L. G., Guarino V., Morra V. & Melluso L.: Petrogenesis of Cenozoic Volcanism in the Cixerri Graben (Southwestern Sardinia)

6-12 Pannello 30

De Cristofaro S.P., Arzilli F.*, Giordano D., Polo L., Janasi V., Fanara S., Burton M., Polacci M., González-García D. & Masotta M.: Pre- and syn-eruptive conditions of Caxias do Sul silicic magmas (Parana? Magmatic Province, Brazil): crystallisation kinetics of dacitic melts

6-13 Pannello 31

Di Fiore F.*, Vona A., Romano C., Sulpizio R. & Mollo S.: The role of undercooling and strain rate on the syn-eruptive rheological evolution of the magma feeding the Pollena eruption of Somma-Vesuvius (Campania, Italy)

6-14 Pannello 32

González-García D.*, Giordano D., Bersani D., Fornasini L., Raneri S., Di Genova D., Dingwell D.B., Russell J.K., Ferrando S. & Lottici P.P.: Raman characterization of natural anhydrous silicate glasses: structure and physical properties of the melt

6-15 Pannello 33

Iacovino K., Giuli G.* & Carroll M.: Sulfur in alkaline melts: An experimental study

6-16 Pannello 34

Milani S., Baratelli L., Comboni D., Maurice J., Lotti P. & Merlini M.*: Structure and thermal equation of state of Ca₃KNa(CO₃)₄ carbonate

6-17 Pannello 35

Stabile P., Appiah H. & Carroll M.R.*: Water solubility in Pantelleritic melts

S7. NEW FRONTIERS IN METAMORPHISM AND DEFORMATION-METAMORPHISM RELATIONSHIPS THROUGH CUTTING-EDGE ANALYTICAL, EXPERIMENTAL, NUMERICAL, AND THEORETICAL TECHNIQUES

7-15 Pannello 36

Corti L.*, Zucali M., Delleani F., Zanoni D. & Spalla M.I.: 3D reconstruction of fabric and metamorphic domains in a slice of continental crust involved in the Alpine subduction system: the example of Mt. Mucrone (Sesia-Lanzo Zone, Western Alps)

7-16 Pannello 37

Croce A.*, Pigazzi E., Rinaudo C. & Zucali M.: Micro-Raman spectroscopy and microstructural thermometers applied for the evaluation of carbonate mylonites deformation temperature

7-17 Pannello 38

Marchesini B.*, Menegon L., Prando F., Schmidt P.K., Garofalo P.S., Schwarz G., Hattendorf B., Günther D., Mattila J. & Viola G.: Evidence of low-temperature plasticity in naturally deformed pyrite: a LA-ICP-TOFMS-EBSD combined approach (Olkiluoto Island, Finland)

S15. GEOBIOLOGY: BIOSPHERE-EARTH INTERACTIONS

15-9 Pannello 39

Bosio G.*, Bracchi V., Malinverno E., Basso D., Collareta A., Gioncada A., Coletti G., Di Celma C. & Bianucci G.: Taphonomic and diagenetic history of a Panopea-rich layer from the Pisco Formation, Peru

15-10 Pannello 40

MalFerrari D., Ferretti A., Mascia M.T., Medici L. & Savioli M.*: Integrated strategies for quantifying major element contents in modern and fossil bioapatite

15-11 Pannello 41

Notaro A.*, Garzarella A. & Raffi I.: Calcareous nannofossils behavior during global warmth intervals of the Neogene

S16. PLANETARY EVOLUTION: NEW INSIGHTS FROM REMOTE SENSING, *IN-SITU*, TERRESTRIAL ANALOGUES AND METEORITE STUDIES

16-19 Pannello 42

Galluzzi V.*, Ferranti F., Massironi M., Giacomini L., Guzzetta L. & Pasquale P.: High-Mg region induced stress field in the Victoria quadrangle of Mercury

16-20 Pannello 43

Giacomini L.*, Galluzzi V., Carli C., Zambon F., Massironi M., Ferranti L. & Palumbo P.: Geological mapping of the Kuiper (H06) quadrangle of Mercury: Integration between morphologic and spectral characteristics

16-21 Pannello 44

Re C.*, Cremonese G., Naletto G. & Tordi M.: HYPPOS, Next generation of a stereo camera

16-22 Pannello 45

Tribaudino M.*, Mantovani L., Bersani D. & Salviati G.: Cathodoluminescence and photoluminescence: combined SEM-EDS and Raman to approach the analysis of anorthite in Ca-Al inclusions

SERVE UN PANNELLO EXTRA : 16-4

Italiano F., Di Bella M.*, Sabatino G., Barbieri R., Cavalazzi B., Ferretti A., Danovaro R., Romeo T., Andaloro F., Esposito V., Tripodo A., Scotti G. & Quartieri S. : Hydrothermal iron ooids on Earth as homologues of hematite spherules discovered on Mars

S22. FROM SEISMIC SOURCE TO FAULT USING MULTIDISCIPLINARY APPROACHES: THE CENTRAL AND SOUTHERN APENNINES AS NATURAL LABORATORY

22-14 Pannello 46

Cirillo D.*, Brozzetti F., de Nardis R., Lavecchia G., Orecchio B., Presti D. & Totaro C.: Multidisciplinary approach for 3D fault geometry reconstruction: an example from Calabrian-Lucanian boundary in the Mt. Pollino area (Southern Apennines-Italy)

22-15 Pannello 47

De Guidi G.*, Barreca G., Bella D., Brighenti F., Carnemolla F., Figlioli A., Menichetti M., Roccheggiani M. & Monaco C.: Multidisciplinary survey methods of the Fiandaca-Pennisi fault zone reactivated during the 26th December 2018 coseismic and postseismic event

22-16 Pannello 48

Ferranti L., Pepe F., Barreca G., Meccariello M. & Monaco C.*: Multi-temporal tectonic evolution of Capo 1 Granitola and Sciacca foreland transcurrent faults (Sicily channel)

22-17 Pannello 49

Forlano S.*, Ferranti L. & Milano G.: Recent and active tectonics in the Campanian Plain based on integration of fault kinematics and seismological data: preliminary results

22-18 Pannello 50

Maraio S.*, Villani F., Serri L., Sapia V., Improta L. & Bruno P.P.: Ultra-shallow imaging of a surface rupture fault of the 30 October 2016 Mw 6.5 central Italy earthquake from multidisciplinary geophysical approach

22-19 Pannello 51

Nappi R.*, Paoletti V., Gaudiosi G., Luiso P., Cella F., Florio G. & Fedi M.: A multi-method approach to characterize the geometry of the Paganica and Matese seismogenetic faults (Central-Southern Apennines, Italy).

22-20 Pannello 52

Porreca M.*, Fabbrizzi A., Azzaro S., Pucci S., Del Rio L., Pierantoni P.P., Giorgetti C., Roberts G. & Barchi M.R.: 3D reconstruction of the M. Vettore seismogenic fault system (Central Apennines, Italy): cross-cutting relationship with the M. Sibillini Thrust

22-21 Pannello 53

Zambrano M.*, Corradetti A., Tavani S., Pitts A., Seers T.D. & Tondi E.: Roughness evaluation of the Monte Vettoreto active fault after the massive 2016 seismic sequence of Central Apennines, Italy

S25. GEOSCIENCES FOR DISASTER RISK REDUCTION: PROBLEMS, SOLUTIONS AND PERSPECTIVE

25-17 Pannello 54

Alvioli M.*, Guzzetti F. & Marchesini I.: Automatic delineation of slope units and terrain classification of Italy

25-18 Pannello 55

Brunetti M.T.*, Peruccacci S., Rossi M., Marchesini I., Denti B., Solimano M., Martinotti M.E., Balducci V. & Guzzetti F.: Regional landslide early warning systems in Italy

25-19 Pannello 56

Chiappetta G.D.*, Gervasi A., Festa R.L. & La Rocca M.: Seismic site effects in the area of Tortora (Northern Calabria)

25-20 Pannello 57

Martinotti M.E.*, Marchesini I., Rossi M., Peruccacci S. & Guzzetti F.: Local indexes, based on a nationwide threshold, for rainfall-induced landslides

25-21 Pannello 58

Porfido S., Nappi R.*, Gaudiosi G., Alessio G. & Michetti A.M.: Between ethics and territorial planning: the value of the ESI-2007 scale

25-22 Pannello 59

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