
MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S1. INTEGRATED MINERALOGY, PETROLOGY AND COMPUTATIONAL MODELLING TO DECIPHER GEOCHEMICAL INTERACTIONS AND TECTONIC HISTORIES RECORDED BY METAMORPHIC ROCKS FROM THE DEEP EARTH

Conveners and Chairpersons: Mattia L. Mazzucchelli (UNPV), Mattia Gilio (UNIPV), Marco Scambelluri (UNIGE), Donato Belmonte (UNIGE)

Aula A

1-1 08.30 - 09.00

[KEYNOTE] Jahn S.*: First-principles molecular dynamics simulations of aqueous fluids at high temperatures and pressures

1-2 09.00 - 09.15

Ferrero S.*, Angel R.J., O'Brien P.J. & Wunder B.: Mineral growth and metastability phenomena in melt inclusions from metamorphic rocks

1-3 09.15 - 09.30

Cámara F.*, Lotti P., Belmonte D., Pagliaro F., Merlini M. & Joseph B.: High pressure softening of grossite (CaAl₄O₇)

1-4 09.30 - 09.45

Morana M.*, Murri M., Girani A., Angel R.J. & Alvaro M.: Characterizing deviatoric stress in mineral inclusions

1-5 09.45 - 10.00

Agrosi G.*, Tempesta G., Mele D., Caggiani M.C., Mangone A., Della Ventura G.C., Cestelli-Guidi M., Allegretta I., Hutchison M.T., Nimis P. & Nestola F.: Multiphase inclusions associated with residual carbonate shed new light on the origin of super-deep diamonds from Juina (Brazil)

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S3. GEORESOURCES, GEOMATERIALS AND THEIR SYNTHETIC CONTEMPORARIES: OCCURRENCE, PROPERTIES, UTILIZATIONS/INDUSTRIAL APPLICATIONS

Conveners and Chairpersons: Stefano Columbu (UNICA), Laura Gaggero (UNIGE), Nicola Mondillo (UNINA), Rossella Arletti (UNITO), Annalisa Martucci (UNIFE)

Sala Congressi

3-13 08.30 - 08.45

Carta R. & Fumanti F.*: The Mineral resources database of Italy (GeMMA)

3-14 08.45 - 09.00

Naitza S.*, De Giudici G.B., Funedda A., Loi A., Meloni M.A., Moroni M., Oggiano G. & Secchi F.: Metallogenesis in Sardinia: the Critical Raw Materials (CRM) perspective

3-15 09.00 - 09.15

Moroni M.*, Sessa G., Tumiatei S., Ferrari E. & Langone A.: Hydromagmatic PGE telluride-rich Ni-Fe-Cu sulfide mineralization related to melt-rock reaction processes in presence of carbonated hydrous fluids: examples from sulfide-rich ultramafic intrusions of the Ivrea-Verbano Zone

3-16 09.15 - 09.30

Giorno M.*, Barale L., Bertok C., D'Atri A., Martire L., Piana F. & Rossetti P. : Gorno mining district (Southern Alps): new preliminary data about ore mineral precipitation and multiphase diagenetic evolution. **VARIAZIONE**

3-17 09.30 - 09.45

Toffolo L., Nimis P.*, Tret'yakov G.A., Melekestseva I.Y. & Beltenev V.E.: What controls metal endowment of massive sulfide deposits on mid-ocean ridges?

3-39 09.45 - 10.00

Moroni M.*, Naitza S., Rossetti P., Ruggieri G., Magnani L., Aquino A., Tartarotti P., Ferrari E., Oggiano G. & Secchi F.: Conditions for hydrothermal cobalt and nickel mineralization - suggestions from some little known, historical ore deposits in Italy

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S12. ADVANCES IN UNDERSTANDING GEOLOGICAL AND PETROLOGICAL PROCESSES IN THE OCEANIC LITHOSPHERE

Conveners and Chairpersons: Giulio Borghini (UNIMI), Camilla Palmiotto (ISMAR-CNR Bologna), Alessio Sanfilippo (UNIPV)

Aula L

12-1 08.30 - 08.45

Sternai P.*: Surface processes forcing on rift magmatism: insights from numerical modeling

12-2 08.45 - 09.00

Maino M.*, Casini L., Sanfilippo A. & Ildefonse B.: From dislocation creep to grain boundary sliding in high-temperature troctolites: insights into shear localization mechanisms in the oceanic crust

12-3 09.00 - 09.15

Grammatica M.*, Fumagalli P. & Borghini G.: The role of melt/rock ratio in olivine-rich troctolite formation via basalt-dunite reaction: an experimental study at 0.5 GPa

12-4 09.15 - 09.30

Renna M.R.*, Tribuzio R., Sanfilippo A., Armandola S., Becker H. & Wang Z.: Highly siderophile elements and Re-Os isotopes of primitive oceanic troctolites: implications for reactive processes during lower crust formation

12-5 09.30 - 09.45

Brunelli D.*, Maia M., Ligi M., Bonatti E., Briaes A., Campos T., Ceuleneer G., Cipriani A., Cuffaro M., Gregory E., Hamelin C., Jbara R., Kaczmarek M.-A., Lombardi F., Moreira S., Mougél B., Petracchini L., Puzenat V., Revillon S., Seyler M., Soltanmohammadi A., Verhoest L., Trivellato T. & Wang Z.: Cold spots at Mid Ocean Ridges help revealing mantle heterogeneity: a summary of the SMARTIES cruise in the Equatorial Atlantic

12-6 09.45 - 10.00

Montanini A., Secchiari A.*, Bosch D. & Tribuzio R.: Pb isotope composition of recycled mantle pyroxenites: insights into the the HIMU source of oceanic basalts?

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S13. A MULTIDISCIPLINARY APPROACH TO UNRAVEL THE EVOLUTION OF BASEMENT GEOLOGY

Conveners and Chairpersons: Antonio Langone (IGG-CNR, Pavia), Chiara Montomoli (UNITO), Salvatore Iaccarino (UNITO)

Aula R

13-1 08.30 - 09.00

[KEYNOTE] Franceschelli M.* & Cruciani G.: Clockwise and anticlockwise P-T path in the axial zone of the Variscan Sardinia-Corsica block

13-2 09.00 - 09.15

Carosi R.*: Partitioned transpressional tectonics in the Variscan Basement of northern Sardinia (Italy)

13-3 09.15 - 09.30

Simonetti M.*, Carosi R. & Montomoli C.: Extension, timing and deformation of the East Variscan Shear Zone

13-4 09.30 - 09.45

Cruciani G.*, Franceschelli M., Massonne H.-J. & Musumeci G.: P-T path of felsic granulite from south-east Corsica (France) and implications for geodynamic setting

13-5 09.45 - 10.00

Bonazzi M.*, Langone A., Zanetti A., Dellarole E., Mazzucchelli M. & Giovanardi T.: Origin of Plumasite dykes intruded in Variscan basement during triassic: new insights from Zircon (Val Sabbiosa, Ivrea-Verbano zone)

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S17. UNVEILING THE ANTARCTICA: GEOLOGICAL, GEOPHYSICAL AND SEDIMENTOLOGICAL APPROACHES TO THE EVOLUTION OF ANTARCTICA (IN MEMORY OF PIETRO ARMIENTI)

Conveners and Chairpersons: Valerio Olivetti (UNIPD), Fabrizio Balsamo (UNIPR), Franco Talarico (UNISI), Fabio Florindo (INGV, Roma), Sergio Rocchi (UNIFI)

Aula M

17-1 08.30 - 08.45

Rocchi S.*, D'Orazio M., Masotta M. & Folco L.: In memory of Pietro Armienti

17-2 08.45 - 09.15

[KEYNOTE] Ferraccioli F.*, Jordan T.A., Forsberg R., Eagles G., Eglington B., Kuszniir N., Olesen A., Matsuoka K., Casal T. & Paxman G.: Aerogeophysical imaging unveils the architecture and basement of the Pensacola-Pole subglacial basin in East Antarctica

17-3 09.15 - 09.30

De Santis L.*, Olivo E., Sorlien C., Kim S., Granot R., Sauli C., Busetti N., Wardell N., Rui L., Perez L.F., Colleoni F., Pochini E., Wilson D., Bart O.J., McKay R.M., Kulhanek D. & IODP Expedition 374 Scientific Party: Miocene paleobathymetric reconstruction of the Ross Sea (Antarctica)

17-4 09.30 - 09.45

Vignaroli G.*, Rossetti F., Di Vincenzo G., Balsamo F., Gerdes A., Theye T. & Ghezzo C.: Late Cambrian-Early Ordovician orogenic construction along the paleo-Pacific margin of Gondwana, USARP Mountains, Northern Victoria Land (Antarctica)

17-5 09.45 - 10.00

Pelorusso B.*, Bonadiman C., Ntaflos T., Gregoire M., Zanetti A. & Coltorti M.: Ultramafic cumulates from Harrow Peaks, (NVL, Antarctica): the first stages of the Ferrar magmatism

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S19. THE INTERPLAY BETWEEN MAGMATIC SYSTEMS AND TECTONICS: INSIGHTS FROM MULTIDISCIPLINARY APPROACHES

Conveners and Chairpersons: Leonardo Casini (UNISS), Eugenio Fazio (UNICT), Davide Zanoni (UNIMI), Manish A. Mamtani (IIT, Karagpur India)

Aula Q

19-1 08.30 - 08.45

Zucchi M.*, Brogi A., Liotta D., Ruggieri G., Fregola R.A., Matera P.F., Dini A., Morelli G., Ventrucci G. & Rimondi V.: Geothermal fluids flow and storage in faulted and folded metasiliciclastics (eastern Elba Island, Italy)

19-2 08.45 - 09.00

Liotta D.*, Brogi A. & Dini A.: Pliocene-Quaternary granitoids in the transfer zone of the Larderello geothermal area (Italy)

19-3 09.00 - 09.15

Lombardo R.*, Fiannacca P., Basei A.S. & Cirrincione R.: Origin and evolution of post-collisional mafic granitoids (Capo Vaticano Promontory, Southern Calabria): geochemical and geochronological constraints

19-4 09.15 - 09.30

Fazio E., Fiannacca P., Cirrincione R.* & Mamtani M.A.: A combined petrofabric and AMS approach to reveal the magmatism-tectonics link in a composite batholith: an example from the Serre Massif (Calabria, Italy)

19-5 09.30 - 10.00

[KEYNOTE] Franceschini Z., Cioni R., Corti G.*, Sani F., Scaillet S., Isola I., Mazzarini F., Erbello A., Muluneh A., Keir D. & Brune S.: Recent volcano-tectonic evolution of the Ririba rift (southern termination of the Main Ethiopian Rift, East Africa)

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S21. ACTIVE TECTONICS AND SEISMOTECTONICS BETWEEN NORTHERN APENNINES AND SOUTHERN ALPS AS A COMPLEX THRUST BELT - FOREDEEP SYSTEM

Conveners and Chairpersons: Riccardo Caputo (UNIFE), Emanuela Falcucci (INGV, Roma), Maria Eliana Poli (UNIUD), Francesco Emanuele Maesano (INGV, Roma)

Aula D

21-1 08.30 - 08.45

Serpelloni E.*, Anderlini L., Pintori F., Vannucci G., Tolomei C., De Martini P.M. & Pezzo G.: Kinematics and seismic potential of the Eastern Southern Alps from space geodetic data

21-2 08.45 - 09.00

Zanchi A.*, Deaddis M., De Amicis M., Marchetti M., Ravazzi C. & Vezzoli G.: The Holocene deformed succession of Montodine (Cremona, Italy): evidence of recent tectonic activity?

21-3 09.00 - 09.15

Zampieri D.*, Burrato P. & Vannoli P.: The Schio-Vicenza fault system: field and seismological evidences and open questions

21-4 09.15 - 09.30

Romano M.A.*, Peruzza L., Garbin M., Priolo E. & Picotti V.: The Montello thrust image obtained with a dense, high-quality seismic network (Southeastern Alps, Italy) **CANCELLATO**

21-5 09.30 - 09.45

Busetti M.*, Zgur F., Dal Cin M., Vrabec M., Baradello L., Böhm G., Brancatelli G., Caffau M., Furlani S., Picotti S. & Zampa L.S.: The effects of the Cenozoic Dinaric and Alpine orogenies in the Gulf of Trieste (North Adriatic Sea)

21-6 09.45 - 10.00

Patricelli G.* & Poli M.E.: Seismotectonic characterization of active faults in the LGM plain between Udine and Pozzuolo (Friuli, NE Italy)

MERCOLEDÌ 18 Settembre 2019 [08.30-10.00]

S29. RECENT ADVANCES IN FLUID GEOCHEMISTRY IN ACTIVE VOLCANIC AND GEOTHERMAL AREAS: FOLLOWING MARIANO VALENZA

Conveners and Chairpersons: Alessandro Aiuppa (UNIPA), Sergio Gurrieri (INGV, Palermo), Franco Tassi (UNIFI), Jacopo Cabassi (UNIFI), Carlo Cardellini (UNIPG)

Aula N

29-1 08.30 - 08.45

[KEYNOTE] Chiodini G.*, Beddini G., Caliro S., Cardellini C., Frondini F. & Rosiello A.: Measuring and interpreting CO₂ and advective heat fluxes at regional scale: the case of Apennines, Italy

29-2 08.45 - 09.00

Calabrese S.*, Li Vigni L., Brugnone F. & Capasso G.: The precious “scientific heritage” of Mariano Valenza: the unknown history of Ludovico Sicardi and the birth of the modern volcanology

29-3 09.00 - 09.15

Di Martino R.M.R.*, Capasso G. & Camarda M.: The on-field measurements of ¹³C/¹²C of the CO₂ improve the consolidated practices of volcano monitoring

29-4 09.15 - 09.30

Federico C.*, Bellomo S., Brusca L., Calabrese S., D’Alessandro W., Falcone E.E & Longo M.: Bioavailability of trace and ultratrace elements in soils in the Mt. Etna volcanic area: the role of the emission source and insights on their mobility in the interstitial solution

29-5 09.30 - 09.45

Tamburello G.* & Carbonara N.: Distribution of the thermal springs in the world in relation to active volcanic and tectonic areas

29-6 09.45 - 10.00

Moretti R.*, Moune S., Robert V., Bonifacie M., Jessop D. & Komorowski J.C.: A geochemical reappraisal of the hydrothermal system of La Soufrière of Guadeloupe (French West Indies) with implications for unrest

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Aula A

1-6 11.30 - 11.45

Locatelli M.*, Verlaquet A., Agard P., Pettke P. & Federico L.: Stepwise brittle deformation at 80 km-depth triggered by internal then external fluid circulation (Monviso eclogitic breccias, W. Alps)

1-7 11.45 - 12.00

Zhong X.*, Andersen N., Dabrowski M. & Jamtveit B.: Zircon and quartz inclusions in garnet used for complimentary Raman-thermobarometry: application to the Holsnøy eclogite, Bergen Arcs, Western Norway

1-8 12.00 - 12.15

Campomenosi N.*, Scambelluri M., Angel R.J., Hermann J., Rubatto D., Mihailova B. & Alvaro M.: Applying Raman-elastic barometry to UHP metamorphic rocks: insights from the Dora Maira Massif (Western Alps)

1-9 12.15 - 12.30

Musiyachenko K.*, Murri M., Prencipe M. & Alvaro M.: Rutile in diamond: the role of elastic anisotropy

1-10 12.30 - 12.45

Nestola F., Zaffiro G., Mazzucchelli M.L., Nimis P.*, Andreozzi G.B., Periotto B., Princivalle F., Lenaz D., Secco L., Pasqualetto L., Logvinova A.M., Sobolev N.V., Lorenzetti A. & Harris J.W.: Diamond-magnesiocromite host-inclusion system recording old deep lithosphere conditions at Udachnaya (Siberia)

1-11 12.45 - 13.00

Rebay G.*, Godard G. & Kiénast J.R.: Eclogite-facies coronitic metagabbro and metatroctolite from the Zermatt-Saas ophiolites, Valtournanche, Italy

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S3. GEORESOURCES, GEOMATERIALS AND THEIR SYNTHETIC CONTERPARTS: OCCURRENCE, PROPERTIES, UTILIZATIONS/INDUSTRIAL APPLICATIONS

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Sala Congressi

3-19 11.30 - 11.45

Ulian G.*, Moro D. & Valdrè G.: Density Functional investigation of the thermomechanical, electronic and thermodynamic properties of ZnS cubic polymorphs

3-20 11.45 - 12.00

Putzolu F.*, Abad I., Balassone G., Boni M., Cappelletti P., Graziano S.F., Maczurad M., Mondillo N., Najorka J. & Santoro L.: Genesis of phyllosilicates in the Wingellina Ni-Co laterite deposit (Western Australia)

3-21 12.00 - 12.15

Santoro L.*, Herrington R. & Putzolu F.: Natural Iron oxy-hydroxides from supergene ore deposits: mineralogical, morphological and geochemical characterization

3-22 12.15 - 12.30

Boschi C.*, Baneschi I., Bonini M., Brogi A., Dini A., Gola G., Lelli M., Liotta D., Norelli F., Manzella A., Montanari D., Montegrossi G., Orlando A., Raco B., Rielli A., Ruggieri G., Santilano A. & Trumpy E.: H2020 GECO - Geothermal Emission Control- Project

3-23 12.30 - 12.45

Comodi P.*, Cavalaglio G., Nicolini A., Cambi C., Vivani R., Zucchini A., Susta U., Frondini F. & Cotana F.: Biomass vs coal ashes: a multi-methodic analysis to assess their hazardousness or reusability

3-24 12.45 - 13.00

Mantovani L.*, Funari V., Tribaudino M., Mazzari C. & Sabatino S.: Bottom ash from Parma WtE plant: mineralogical and chemical characterization

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Aula L

12-7 11.30 - 12.00

[KEYNOTE] Bonatti E.*: Early days of the plate tectonics revolution: “Geo-data gatherers” versus “Geopoets”

12-8 12.00 - 12.15

Sani C.*, Sanfilippo A., Ohara Y., Snow J., Harigane Y. & Yamashita H.: Mado Megamullion (Shikoku basin): a new window into a backarc lower crust and mantle

12-9 12.15 - 12.30

Ligi M.*, Bonatti E., Brunelli D. & Cuffaro M.: Global Seafloor Spreading Variations and the Evolution of Seawater Composition since the Mesozoic

12-10 12.30 - 12.45

Guerini S.* & Tartarotti P.: Listvenites in the western Alps: the case of the Mount Avic massif (Aosta Valley, northwestern Alps)

12-11 12.45 - 13.00

Luoni P.*, Rebay G., Roda M., Spalla M.I. & Zanoni D.: UHP relics in the Zermatt-Saas Zone serpentinites: new puzzle tiles in the geodynamic scenario

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Aula R

13-6 11.30 - 11.45

Giuntoli F.*, Menegon L., Warren C., Darling J. & Anderson M.: Protracted shearing at mid crustal conditions in the Scandinavian Caledonides

13-7 11.45 - 12.00

Tursi F.*, Acquafredda P., Festa F., Fornelli A., Langone A., Micheletti F. & Spiess R.: Reworking of felsic rocks in ductile shear zones: an example from the Curinga-Girifalco line

13-8 12.00 - 12.15

Montemagni C.*, Zanchetta S., Montomoli C., Iaccarino S., Visonà D., Villa I.M. & Carosi R.: Geochronology and kinematics of flow of the Main Central Thrust zone in the Bhagirathi valley, NW Indian Himalaya

13-9 12.15 - 12.30

Nania L.*, Montomoli C., Iaccarino S., Leiss B., Di Vincenzo G. & Carosi R.: Kinematics and deformation temperatures of the MCTz and the STDS in Central Himalaya

13-10 12.30 - 12.45

Molli G.*, Vitale Brovarone A., Beyssac O. & Cinquini I.: Thermal architecture and deformation structures in the Alpi Apuane (NW Tuscany Italy): new insights for the metamorphic and tectonic history of the inner northern Apennines

13-11 12.45 - 13.00

Martini M.* & Zepeda-Martínez M.: The Jurassic exhumation history of basement rocks in Mexico preserved in the stratigraphic record of rift basins associated to Pangea breakup

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Aula M

17-6 11.30 - 11.45

Giacomoni P.P.*, Coltorti M., Bonadiman C., Ferlito C., Casetta F., Zanetti A. & Ottolini L.: Subduction-related volatiles involved in the genesis of Cenozoic primary alkaline melts in Northern Victoria Land

17-7 11.45 - 12.00

Dallai L.* & Sharp Z.D.: Continental hydrology and atmospheric circulation during Cenozoic super warm periods

17-8 12.00 - 12.15

Tribuzio R.*, HenjesKunst F., Gerdes A. & Braga R.: Geochemical, isotopic and geochronological constraints on formation of boninite-type rocks at the Paleopacific margin of Gondwana

17-9 12.15 - 12.30

Rocchi S.* & Smellie J.L.: Plutons, dykes and volcanoes as witnesses of lithospheric thinning, faulting and necking in northern Victoria Land, Antarctica

17-10 12.30 - 12.45

Balestrieri M.L.*, Olivetti V., Rossetti F., Gautheron C. & Zattin M.: Topography, structural and thermochronological analysis in the Admiralty Block, northern Victoria Land, Antarctica: decoding the Cenozoic evolution of the NE termination of the Transantarctic Mountains

17-11 12.45 - 13.00

Zurli L.*, Cornamusini G., Liberato G.P., Talarico F.M., Woo J. & Corti V.: Provenance study of Late Palaeozoic Ice Age sequences in Victoria Land (Antarctica): petrography and geochronology

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Aula Q

19-6 11.30 - 11.45

Visalli R., Fazio E., Ortolano G.*, Alsop G.I., Pagano M. & Cirrincione R.: Semi-automated fabric analysis of strong rheologically contrasting mylonitic rocks: the example from the strike-slip Palmi shear zone

19-7 11.45 - 12.00

Corvò S.*, Langone A., Maino M., Cuccuru S., Oggiano G. & Seno S.: Petrological and geochronological constraints of a shallow intrusion into the Variscan medium-grade metamorphic sequence of the Asinara Island (Sardinia)

19-8 12.00 - 12.15

Gaggero L.*, Maino M., Cuccuru S. & Oggiano G.: Bimodal felsic-mafic volcano-plutonic magmatism associated to intramontane basins: the late-Variscan geodynamics recorded in North Sardinia (Italy)

19-9 12.15 - 12.30

Casini L.*, Maino M. & Montserrat L.: Frictional-viscous heating in strong elliptical inclusions during simple shear

19-10 12.30 - 12.45

Roda M.* & Zaroni D.: Multidisciplinary approach to test the thermal state of Biella pluton country rocks

19-11 12.45 - 13.00

Spiess R., Caggianelli A., Langone A., Stuart F., Bianco C., Zucchi M., Brogi A.* & Liotta D.: The cooling, deformation and exhumation history of the late Miocene syn-tectonic Porto Azzurro pluton in a transfer zone (Elba Island, Italy)

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Aula D

21-7 11.30 - 11.45

Cheloni D.*, Giuliani R., D'Agostino N., Mattone M., Bonano M., Fornaro G., Lanari R., Reale D. & Atzori S.: Active seismotectonics of the Northern Apennines: insights from the 2012 Emilia earthquake sequence

21-8 11.45 - 12.00

Mascandola C.*, Massa M., Barani S., Albarello D., Lovati S., Martelli L., Poggi V. & Morasca P.: Seismo-stratigraphic model of the Po Plain (Italy)

21-9 12.00 - 12.15

Bonadeo L.*, Frigerio C., Ferrario M.F., Livio F., Michetti A.M., Bitonte R., Scaramuzzo E., Zerboni A., Porat N., Fioraso G., Irace A., Catanzariti R., Da Prato S., Ellero A. & Ottria G.: A multidisciplinary approach to the structural setting and morphotectonics of the Eastern Monferrato Arc: new constraints to the seismic hazard assessment of a slowly deforming area

21-10 12.15 - 12.30

Zuffetti C.* & Bersezio R.: Late Quaternary sedimentation and tectonics in the Po Basin: field evidences at the Po Plain-Apennines border (Lombardy)

21-11 12.30 - 12.45

Teloni S., Invernizzi C.*, Costa M. & Pierantoni P.P.: Seismogenic structures in the onshore-offshore Padano-Adriatic foothills between Emilia Romagna and Marche: a tentative modelling for the evaluation of risks in seismically quiet areas

21-12 12.45 - 13.00

Sbarra P., Burrato P.*, Tosi P., Vannoli P., De Rubeis V. & Valensise G.: A new approach to estimate the depth of historical earthquakes: seismotectonic implications for the Northern Apennines and the southern Po Plain

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Aula N

29-7 11.30 - 11.45

Tassi F.* : Past and present of geochemical investigations on meromictic volcanic lakes: hints for the next future

29-8 11.45 - 12.00

Rouwet D.*, Tamburello G., Procesi M., Venturi S., Santi A., Chiodini G., Pecoraino G., Ricci T., Cabassi J. & Tassi F.: Resuming volcanic surveillance at Lake Albano: updates on the dissolved gas content and vertical temperature profiles

29-9 12.00 - 12.15

Venturi S.*, Cabassi J., Butturini A., Vazquez E., Pacini N., Tassi F., Vaselli O., Amalfitano S., Crognale S., Rossetti S., Harper D.M., Capecchiacci F. & Fazi S.: Tropical saline-alkaline lakes as a major source of greenhouse gases: evidence from lake Sonachi, Kenya

29-10 12.15 - 12.30

Cabassi J., Capecchiacci F., Magi F.*, Vaselli O., Tassi F., Montalvo F., Esquivel I., Grassa F. & Caprai A.: Water and dissolved gas geochemistry at Coatepeque, Ilopango and Chanmico volcanic lakes (El Salvador, Central America)

29-11 12.30 - 12.45

Cardellini C.*, Chiodini G., Frondini F., Caliro S., Avino R., Bagnato E., Beddini G. & Rosiello A.: Carbon dioxide diffuse emission in volcanic and hydrothermal areas: monitoring volcanic activity and impact on carbon global emissions

29-12 12.45 - 13.00

Gagliano A.L.*, Daskalopoulou K. & D'Alessandro W.: New perspectives in geothermal CH₄ output estimation

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S3. GEORESOURCES, GEOMATERIALS AND THEIR SYNTHETIC CONTERPARTS: OCCURRENCE, PROPERTIES, UTILIZATIONS/INDUSTRIAL APPLICATIONS

Conveners and Chairpersons: Stefano Columbu (UNICA), Laura Gaggero (UNIGE), Nicola Mondillo (UNINA), Rossella Arletti (UNITO), Annalisa Martucci (UNIFE)

Sala Congressi

3-25 15.30 - 15.45

Funari V.*, Mantovani L., Vigliotti L., Dinelli E. & Tribaudino M.: Municipal solid waste incineration (MSWI) ashes: potential impacts and metal resources assessed by environmental magnetic methods

3-26 15.45 - 16.00

Gaggero L.*, Ferretti M. & Locardi F.: Assessment of post treatment acceptance for Asbestos-Containing Waste by differential thermal analysis and thermo-gravimetry (DTA-TG)

3-27 16.00 - 16.15

Zanelli C.*, Conte S., Molinari C., Soldati R., Guarini G. & Dondi M.: Geomaterials on the edge of the circular economy: the case study of the ceramic tile industry

3-28 16.15 - 16.30

Dondi M.*, Guarini G., Conte S., Molinari C., Soldati R. & Zanelli C.: A global view at sourcing and composition of fluxes for ceramics

3-29 16.30 - 16.45

Conte S.*, Zanelli C., Melchiades F.G., Hernández-Sánchez M.Y., Boschi A.O. & Dondi M.: Brazilian phyllite as feldspar substitute in ceramic bodies

3-30 16.45 - 17.00

Ardit M.* & Dondi M.: Micronization of ceramic pigments: the mineralogist's viewpoint on comminution rate and amorphisation

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S9. ISOTOPIC TRACERS AND TIMING OF DYNAMIC EVOLUTION OF SUBDUCTION ZONE SETTINGS

Conveners and Chairpersons: Enrico Cannaò (UNIMI), Martina Casalini (UNIFI), Federico Farina (UNIMI)

Aula A

9-1 15.30 - 16.00

[KEYNOTE] Elliott T.*, Freymuth H., Andersen M., Chen S. & Hin R.: Isotopic fractionations between dehydration fluid and descending slab

9-2 16.00 - 16.15

Bragagni A., Mastroianni F., Avanzinelli R.*, Conticelli S. & Münker C.: Extreme HFSE fractionation in Italian magmas: metasomatism vs. different mantle domains

9-3 16.15 - 16.30

Natali C., Aghazadeh M., Braschi E., Badrzadeh Z., Bianchini G. & Conticelli S.*: Eocene subduction to collision-related volcanism in the Arasbaran area (NW, Iran): evidence for progressive evolution of mantle sources

9-4 16.30 - 16.45

Di Giuseppe P.*, Agostini S., Manetti P., Savascin M.Y. & Conticelli S.: Early Miocene to Pliocene magmatic activity in the Sivas-Malatya Volcanic Region (Central-Eastern Anatolia)

9-5 16.45 - 17.00

Tumiati S.*: Decoupling between the carbon isotopic signature of CO₂-bearing aqueous fluids and of their graphite+carbonate source at subarc depth

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S11. MANTLE PETROLOGY: FROM OBSERVATION TO CALCULUS

Conveners and Chairpersons: Enrico Bonatti (ISMAR-CNR, Bologna), Giulio Ottonello (UNIGE)

Aula L

11-1 15.30 - 15.45

[KEYNOTE] Belmonte D.*: *Ab initio* thermodynamics of deep mantle phase transitions and seismic discontinuities: the role of MgSiO₃ polymorphs

11-2 15.45 - 16.00

Merli M., Bonadiman C. & Pavese A.*: Oxidation state of iron in the Earth's lower mantle

11-3 16.00 - 16.15

Merli M., Bonadiman C.* & Pavese A.: Earth's non-primitive lower mantle: aluminium recycling

11-4 16.15 - 16.30

Li P., Xia Q.-K., Dallai L., Bonatti E., Brunelli D., Cipriani A. & Ligi M.*: H₂O Enrichment in Residual Mantle Peridotites at a Mid-Atlantic Ridge Segment

11-5 16.30 - 16.45

Papale P.*: Why do we need mathematical models in petrology and volcanology?

11-6 16.45 - 17.00

Moretti R.*: Vapor-buffered magmatic activity and the unique CO₂-rich source of magmatism in Southern Italy

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S13. A MULTIDISCIPLINARY APPROACH TO UNRAVEL THE EVOLUTION OF BASEMENT GEOLOGY

Conveners and Chairpersons: Antonio Langone (IGG-CNR, Pavia), Chiara Montomoli (UNITO), Salvatore Iaccarino (UNITO)

Aula R

13-12 15.30 - 15.45

Bartoli O.*: Constraining fluid regime during melting of crystalline basements: experiments vs. thermodynamic modelling

13-13 15.45 - 16.00

Casini L.*, Corvò S., Maino M., Seno S. & Schenker F.: Numerical modelling of floating P-T conditions in inclusion-matrix systems, with application to the Cima Lunga Unit (Central Alps)

13-14 16.00 - 16.15

Renna M.R.*, Langone A., Caggianelli A. & Prosser G.: Interaction between migmatite-related melts and amphibole-gabbros: evidence from mineral geochemistry and zircon dating (Variscan lower crust, Palmi area, SW Calabria)

13-15 16.15 - 16.30

Corvò S.*, Maino M., Langone A., Piazzolo S., Seno S. & Schenker F.: Determination of P-T-t-d path in a high-grade shear zone: petro-chronological and microstructural study from the Cima di Gagnone (Adula-Cima Lunga nappe, Central Alps)

13-16 16.30 - 16.45

Van Schroyen Lantman H.W.*, Langone A., Scambelluri M. & Alvaro M.: Uncovering UHPM garnet growth and dissolution mechanisms using trace elements in metasediments from Lago di Cignana, Western Alps

13-17 16.45 - 17.00

Zucchi M.*: Faults-controlling geothermal fluid flow in low permeability rock volumes: an example from the eastern Elba Island (northern Tyrrhenian Sea, Italy)

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S18. MECHANICAL, CHEMICAL AND HYDRAULIC INTERACTIONS IN SEISMOGENIC FAULT ZONES

Conveners and Chairpersons: Silvia Mittempergher (UNIMIB), Michele Fondriest (UNIPD), Fabrizio Balsamo (UNIPR), Stefano Zanchetta (UNIMIB)

Aula M

18-1 15.30 - 16.00

[KEYNOTE] Aben F.M.*: Rupture-induced off-fault damage: Laboratory quantification and implications for fault mechanics

18-2 16.00 - 16.15

Coppola M.*, Billi A., Stagno V., Cavallo A., Correale A., Fondriest M., Nazzari M., Paonita A., Romano C., Viti C. & Vona A.: Fluid-mediated deformation processes along the seismogenic Mt. Morrone fault zone (Central Apennines, Italy)

18-3 16.15 - 16.30

Marchesini B.*, Garofalo P.S., Menegon L., Mattila J. & Viola G.: Fluid-mediated, brittle-ductile cyclicity at seismogenic depth: Fluid record and deformation history of a fault system of the Svecofennian basement in SW Finland

18-4 16.30 - 16.45

Malatesta C.*, Crispini L., Läufer A., Ildefonse B., Federico L. & Scarsi M.: Microstructural investigation of a prehnite-epidote bearing detachment horizon in granite (northern Victoria Land, Antarctica): influence of hydrothermal fluids on the fault mechanics

18-5 16.45 - 17.00

Vadacca L.*, Rossi D., Scotti A. & Buttinelli M.: Understanding the hydro-mechanical interaction in active fault zones by induced seismicity studies

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S23. ANALOGUE AND NUMERICAL MODELLING OF GEOLOGICAL PROCESSES: LINKING OBSERVATION, INTERPRETATION AND PREDICTION

Conveners and Chairpersons: Marco Bonini (CNR-IGG, Firenze), Giacomo Corti (CNR-IGG, Firenze), Francesca Funicello (UNIROMA3), Antonello Provenzale (CNR-IGG, Pisa), Pietro Sternai (UNIMIB)

Aula Q

23-1 15.30 - 16.00

[KEYNOTE] Ruch J.*: Combining analogue experiments with ground deformation from space to study volcano tectonic processes

23-2 16.00 - 16.15

Corbi F.*: Improving subduction megathrusts seismic hazard assessment: a proof of concept based on analog modelling and machine learning

23-3 16.15 - 16.30

Cocco F.* & Funedda A.: An attempt at modelling the lithosphere of Sardinia block and surroundings: relationships among isostatic disequilibrium, geomorphic features and neotectonics

23-4 16.30 - 16.45

Zwaan F., Corti G., Keir D. & Sani F.*: Factors controlling the structural architecture of continental rift margins: insights from analogue centrifuge models

23-5 16.45 - 17.00

Lanzi C.*, Trasatti E. & Battaglia M.: Unveiling the engine of mid-term deformations at Ischia resurgent caldera (Italy) using remote sensing and *in situ* data

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S29. RECENT ADVANCES IN FLUID GEOCHEMISTRY IN ACTIVE VOLCANIC AND GEOTHERMAL AREAS: FOLLOWING MARIANO VALENZA

Conveners and Chairpersons: Alessandro Aiuppa (UNIPA), Sergio Gurrieri (INGV, Palermo), Franco Tassi (UNIFI), Jacopo Cabassi (UNIFI), Carlo Cardellini (UNIPG)

Aula N

29-13 15.30 - 15.45

Lelli M.*, Taramaelli M., Aripk K., Sadock J., Pisani P., Pasqua C., Principe C., Mnzava F., Armadillo E., Rizzello D. & Mkangala A.: Relationships between CO₂ soil degassing and regional/local fault systems in the Kiejo-Mbaka geothermal prospect (Tanzania)

29-14 15.45 - 16.00

Li Vigni L.*, D'Alessandro W., Cardellini C., Daskalopoulou K., Calabrese S. & Brugnone F.: Preliminary study on geogenic degassing through the big karstic aquifers of Greece

29-15 16.00 - 16.15

Mancini A.*, Frondini F., Capezzuoli E., Galvez Mejia E., Lezzi G., Matarazzi D., Brogi A. & Swennen R.: Travertine masses from western Central Italy and natural Earth degassing: an approach to evaluate the geogenic CO₂ flux

29-16 16.15 - 16.30

Bini G.*, Chiodini G., Cardellini C., Vougioukalakis G.E. & Bachmann O.: Estimating the energetic budget of hydrothermal systems using diffuse emission of CO₂: the case of Nisyros (Greece)

29-17 16.30 - 16.45

Nicodemi L.*, Brogi A., Capezzuoli E., D'Orazio M., Fulignati P. & Zanchetta G.: Unravelling hypogean mineralizing fluids from the geochemistry of epigeal travertines: insights from central-southern Tuscan (Italy) **VARIAZIONE SOSTITUITO DA:**

29-21

Brugnone F.*, Calabrese S., D'Alessandro W., Li Vigni L. & Parello F.: The impact of Mt. Etna's ash plume on the chemical composition of meteoric deposition

29-18 16.45 - 17.00

Ruggieri G., Orlando A.* & Borrini D.: The synthesis of fluid inclusions: from the lab to geothermal wells

MERCOLEDÌ 18 Settembre 2019 [15.30-17.00]

S31. GEOCHEMISTRY OF MERCURY: FROM NOBLE METAL TO GLOBAL POLLUTANT

Conveners and Chairpersons: Stefano Covelli (UNITS), Orlando Vaselli (UNIFI), Barbara Nisi (IGG-CNR, Pisa)

Aula D

31-1 15.30 - 16.00

[KEYNOTE] Pirrone N.*: What are the major challenges that should be taken on board in supporting nations in the implementation of the Minamata convention on mercury

31-2 16.00 - 16.15

Cabassi J.*, Rimondi V., Yeqing Z., Vacca A., Vaselli O., Buccianti A. & Costagliola P.: 100 years of high GEM concentration in the Central Italian Herbarium and Tropical Herbarium Studies Centre (Florence, Italy)

31-3 16.15 - 16.30

Monaci F.*, McLagan D.S., Rappuoli D., Huang H., Lei Y.D., Mitchell C.P.J. & Wania F.: Long-term monitoring and modeling of gaseous mercury concentrations around the abandoned mine of Abbadia San Salvatore: the potential of passive sampling for detecting variation patterns and effects of emission-reduction associated with remediation works

31-4 16.30 - 16.45

Acquavita A.*, Brandolin D., Felluga A., Maddaleni P., Meloni C., Poli L., Skert N. & Zanello A.: Mercury distribution and speciation in soils contaminated by historically mining activity: the Isonzo River plain (NE Italy)

31-5 16.45 - 17.00

Bianchi F.*, Rappuoli D., Vaselli O., Nisi B. & Esposito A.: Distribution of mercury, antimony and arsenic in the terrains from the former mining area of Abbadia San Salvatore (Siena, central Italy)

MERCOLEDÌ 18 Settembre 2019 [IES] - (10.30 - 11.30)

Area Poster

- 1-12 Lorenzon S.*, Nestola F., Thomassot E., Prosperi L., Lorenzetti A., Alvaro M., Salvadego F. & Nimis P.: Super-deep diamond from Central African Republic
- 1-13 Geddo Z.*, Mazzucchelli M.L. & Alvaro M.: Combining micro-tomography and finite element analyses for elastic geobarometry on real geological samples
- 9-6 Malaspina N.* & Tumiatei S.: Redox processes and the role of carbon-bearing volatiles at subduction zones: natural versus experimental perspectives
- 9-7 Tamburello G.*: The importance of direct gas flux measurements at active volcanoes for understanding the geochemical cycles in the subduction zones
- 12-12 Ferrari E.*, Montanini A., Secchiari A., Bosch D. & Cluzel D.: Pyroxenite diversity in the New Caledonia mantle sequence: a preliminary study
- 12-13 Mosconi A.*, Sanfilippo A., Liu C.Z., Salters V., Tribuzio R. & Zanetti A.: Isotopic heterogeneity of mantle melts migrating through the Lanzo South Ophiolite: a focus on Re-Os isotopes and PGE
- 12-22 Verhoest L.*, Brunelli D., Hemond C., Bonatti E., Ligi M. & Cipriani A.: Mantle source heterogeneity in the Equatorial Mid Atlantic Ridge: a multi-isotopic approach
- 13-18 Petroccia A.*, Carosi R., Montomoli C. & Simonetti M.: 1:25.000 structural map of Mamone in the northern of the Sardinian variscan basement
- 13-19 Zepeda-Martínez M.* & Martini M.: Tectono-sedimentary evolution of the Tlaxiaco Basin, southern Mexico: A key to understand the Jurassic structural history of Proterozoic and Paleozoic basement rocks of Mexico during Pangea breakup
- 18-6 Cerchiari A.*, Remitti F., Mittempergher S., Festa A., Lugli F. & Cipriani A.: Interrelated changes in fluid sources and stress field orientation during the seismic cycle reconstructed for an exhumed analogue of the subduction megathrust shallow portion
- 18-7 Pizzati M.*, Balsamo B. & Storti F.: Influence of accommodated displacement upon microstructural and petrophysical properties of deformation bands and gouges affecting faulted high-porosity siliciclastic sediments (Rocca di Neto fault zone, Crotona Basin, Italy)
- 23-6 Spreafico M.C.*, Sternai P. & Agliardi F.: Rock-slope failure after deglaciation: rapid response or progressive long-term evolution? Insights from numerical modelling
- 29-19 Di Martino R.M.R.*, Camarda M. & Gurrieri S.: The monitoring of hydrogen and carbon dioxide at Stromboli volcano
- 31-6 Petranich E.*, Pavoni E., Signore S. & Covelli S.: Mercury mobility in harbour sediments: evidence from selective sequential extraction and short-term microcosm resuspension experiments (northern Adriatic Sea, Italy)
- 31-7 Magi F.*, Cabassi J., Capecchiacci F., Giannini L., Nisi B., Pandeli E., Rappuoli D., Tassi F., Venturi S. & Vaselli O.: Mercury in groundwater from the Mt. Amiata area (central Italy)

MERCOLEDÌ 18 Settembre 2019 [POSTER]

Area Poster

S1. INTEGRATED MINERALOGY, PETROLOGY AND COMPUTATIONAL MODELLING TO DECIPHER GEOCHEMICAL INTERACTIONS AND TECTONIC HISTORIES RECORDED BY METAMORPHIC ROCKS FROM THE DEEP EARTH

1-14 Pannello 1

Bonazzi M.*, Tumiati S., Thomas J., Angel R.J. & Alvaro M.: Elastic geobarometry for Quartz inclusions in garnet: comparison between hydrostatic and isotropic methods to evaluate the entrapment pressures

1-15 Pannello 2

Capizzi L.S.*, Stagno V., Andreozzi G.B., Bosi F., Nazzari M. & Scarlato P.: Experimental investigation of the stability of iron-rich tourmaline as a function of pressure, temperature and oxygen fugacity with implications for the release of B-rich fluid during subduction

1-16 Pannello 3

La Fortezza M.*, Campione M., Alvaro M., Scambelluri M. & Malaspina N.: Multiphase inclusions in harzburgites from the Bétic Cordillera (Cerro de Almirez, Spain): growth and orientation of magnetite in olivine

1-17 Pannello 4

Pasqualetto L.*, Nestola F., Nimis P., Jacob D.E., Oliveira B., Perritt S., Chinn I., Milani S. & Harris J.W.: Crystallographic relationships between diamond and its clinopyroxene inclusions

S9. ISOTOPIC TRACERS AND TIMING OF DYNAMIC EVOLUTION OF SUBDUCTION ZONE SETTINGS

9-8 Pannello 5

Agostini S.*, Di Giuseppe P., Manetti P., Savascin M.Y., Doglioni C. & Conticelli S.: Early Miocene to Pleistocene Na-alkaline Volcanism on the North-East Arabian plate (South-East Turkey)

9-9 Pannello 6

Cannaò E.*, Scambelluri M. & Tiepolo M.: Into deep and beyond: carbon and nitrogen subduction recycling by secondary peridotites

9-10 Pannello 7

Cannaò E.*, Tiepolo M., Sessa G., Deloule E. & Poli S.: Amphibole as carbon fixing mineral at lower crust depth

9-11 Pannello 8

Casalini M.*, Avanzinelli R., Tommasini S., Garzonio C.A., Cioni R. & Conticelli S.: Genesis and differentiation of a calc-alkaline volcano in syn-collisional continental setting: the Mount Ararat (Ağrı Dağı, Eastern Anatolia)

9-12 Pannello 9

Gilio M.*, Scambelluri M., Agostini S., Godard M., Pettke T., Agard P., Locatelli M. & Angiboust S.: Fingerprinting and relocating tectonic slices along the plate interface: evidence from the Lago Superiore Unit at Monviso (Western Alps)

9-13 Pannello 10

Narduzzi F., Farina F.*, Lana C., Teixeira L., Schannor M., Stevens G., Alkmim A. & Nalini Jr H.A.: Long-lived petrological cannibalism and slow cooling rates for the Galiléia batholith (SE Brazil): supporting the “hot” nature of Araçuaí-West Congo orogen

9-14 Pannello 11

Tumiati S.*: Dissolution of graphite in high-pressure aqueous fluids: the roles of crystallinity and of coexisting silicates and carbonates

S11. MANTLE PETROLOGY: FROM OBSERVATION TO CALCULUS

11-7 Pannello 12

Del Vecchio A.*, Poe B.T., Cestelli-Guidi M. & Misiti V.: Point defect equilibria in hydrous forsterite synthesized at 1100°C and up to 4 GPa

11-8 Pannello 13

Ottonello G.*, Belmonte D. & Vetuschi Zuccolini M.: Thermochemistry of silicate melts in high-rank simplexes: the new HPA model

11-9 Pannello 14

Sanfilippo A.*, Sokolov S., Salters V.J.M., Stracke A. & Peyve A.: Melting an anciently depleted mantle

11-10 Pannello 15

Vetuschi Zuccolini M.*, Ottonello G. & Belmonte D.: TRIangular DIagram and deSCENT line analysis - a code to generate a computationally manageable liquidus surface of a molten silicate system and a consistent cooling descent line description from modeling **CANCELLATO**

S12. ADVANCES IN UNDERSTANDING GEOLOGICAL AND PETROLOGICAL PROCESSES IN THE OCEANIC LITHOSPHERE

12-14 Pannello 16

Assanelli M.*, Luoni P., Rebay G. & Spalla M.I.: Structural and metamorphic evolution of Gias Vej serpentinites (Piemonte Zone, Lanzo Valley, Italian Western Alps)

12-15 Pannello 17

Basch V., Rampone E.*, Ferrando C., Borghini G. & Zanetti A.: pMELTS modeling of depleted melts evolution in oceanic environment: implications of pyroxenite formation as deep melt segregation

12-16 Pannello 18

Borghini G.* & Fumagalli P.: Partial melting experiments on olivine-free pyroxenites at 2 GPa

12-17 Pannello 19

Deraco M.*, Sanfilippo A., Ligi M., Rasul N., Vigliotti L., Jerais A., Tharowi A., Langone A. & Zanetti A.: Formation of a hybrid oceanic crust at the onset of the Red Sea opening (Tihama Asir magmatic complex, Saudi Arabia)

12-18 Pannello 20

La Rosa A.*, Pagli C., Keir D., Sani F., Corti G., Wang H. & Posee D.: Observing oblique slip during rift-linkage processes in Northern Afar

12-19 Pannello 21

Salvioli-Mariani E.*, Boschetti T., Toscani L., Montanini A., Petriglieri J.R. & Bersani D.: Multi-stage rodingitization of ophiolitic bodies from Northern Apennines (Italy): constraints from petrography, geochemistry and thermodynamic modelling

12-20 Pannello 22

Sani F.*, Bonini M., Corti G. & Moratti G.: The role of rift width in controlling fault pattern and kinematics in oceanic and continental rifts: examples from Iceland and Ethiopia

12-21 Pannello 23

Savelli C.*: Oceanization and hydrography (West Mediterranean) **CANCELLATO**

S13. A MULTIDISCIPLINARY APPROACH TO UNRAVEL THE EVOLUTION OF BASEMENT GEOLOGY

13-20 Pannello 24

Benà E., Martin S., Marzoli A., Mazzoli C., Sassi R.* & Zattin M.: Apatite (U-Th)/He thermochronometry from trachytes and latites of the Euganean Hills and their exhumation history

13-21 Pannello 25

Carosi R.*, Montomoli C., Iaccarino S. & Visonà D.: The High Himalayan Discontinuity and the Main Central Thrust in Central Nepal: timing constraints by *in-situ* U-Th-Pb monazite petrochronology

13-22 Pannello 26

Iaccarino S.*, Carosi R., Montomoli C., Montemagni C., Massonne H.-J., Jain A.K. & Visonà D.: Geology and tectono-metamorphic history of the Himalayan metamorphic core: insights from the Alaknanda-Dhauliganga valleys (NW India)

13-23 Pannello 27

Möller C., Andersson J. & Rebay G.*: High-temperature metamorphism and deformation in the footwall of an eclogite-bearing nappe, Sveconorwegian orogen: metamorphic evolution of the Obbhult Complex, SW Sweden

13-24 Pannello 28

Morelli G.*, Ruggieri G., Zucchi M., Braschi E., Agostini S., Ventruti G., Brogi A., Liotta D., Boschi C. & González-Partida E.: Characterization and evolution of the paleo-fluids in the Las Minas exhumed geothermal system (Mexico)

13-25 Pannello 29

Ortolano G., D'Agostino G.*, Visalli R., Fiannacca P. & Cirrincione R.: Development of vermicular clinopyroxene-amphibole symplectites replacing garnet in amphibolites of the Peloritani Mountain (Northeastern Sicily)

13-26 Pannello 30

Ortolano G., Visalli R.*, Fazio E., Fiannacca P., Godard G., Pezzino A., Punturo P., Sacco V. & Cirrincione R.: Unravelling cooling rates of the Calabria continental lower crust from combined microstructural, thermodynamic and diffusion modeling: an example from the Sila Piccola Massif, (Northern Calabria)

13-27 Pannello 31

Petroccia A.*, Carosi R., Montomoli C. & Simonetti M.: Geochronology and deformation in the Posada-Asinara Line (NE Sardinia basement, Baronia, Italy): timing and shearing constraints in the Southern European Variscan belt

13-28 Pannello 32

Simonetti M.*, Carosi R. & Montomoli C.: Structural analysis, kinematic of the flow and petrochronology of shear deformation in the Aiguilles Rouges Massif

S17. UNVEILING THE ANTARCTICA: GEOLOGICAL, GEOPHYSICAL AND SEDIMENTOLOGICAL APPROACHES TO THE EVOLUTION OF ANTARCTICA (IN MEMORY OF PIETRO ARMIENTI)

17-12 Pannello 33

Battaglia F.*, Baradello L., De Santis L., Gordini E., Sauli C., Kovacevic V., Morelli D., Langone L., Colleoni F., Colizza E., Rebesco M. & Accetella D.: High resolution seismo-stratigraphic evidence from the Edisto Inlet fjord, western Ross Sea (Antarctica)

17-13 Pannello 34

Capponi G.*, Montomoli C., Casale S., Simonetti M., Musumeci G. & Salvatore M.C.: Geology of the Convoy Range and Franklin Island quadrangle, Victoria Land - Antarctica

17-14 Pannello 35

Cornamusini G.*, Zurli L., Perotti M. & Talarico F.M.: Deformational structures in Paleozoic sandstones of the Transantarctic Mountains: glacial vs tectonic origin

17-15 Pannello 36

Dal Seno N., Lelli L.*, Millikin L., Smith Lyttle B., Cox S.C., Crispini L. & Burton-Johnson A.: GeoMAP dataset of the Antarctic Peninsula

17-16 Pannello 37

Federico L.*, Cianfarra P., Crispini L., Capponi G., Rossi C. & Salvini F.: Reconstruction of multiple tectonic events in the Rennick Geodynamic Belt (northern Victoria Land, Antarctica) through inversion of fault slip data

17-17 Pannello 38

Ferraccioli F.*, Armadillo E., Crispini L., Läufer A., Ruppel A. & Lisker F.: Crustal architecture of a major pull apart basin in northern Victoria Land, East Antarctica

17-18 Pannello 39

Guzzo G.*, Cattò S., Olivetti V., Zattin M., Balsamo F., Balestrieri M.L. & Rossetti F.: Thermochronological evolution of Transantarctic Mountains in the Mt Murray area

17-19 Pannello 40

Iaccarino S.*, Carosi R., Montomoli C. & Massonne H.-J.: Tectonometamorphic evolution of the Dessent Unit (northern Victoria Land, Antarctica): new data from pseudosection modeling of metasediments

17-20 Pannello 41

Li X.*, Zattin M. & Olivetti V.: The detrital apatite fission-track signature of post-LGM sediments in the Ross Sea

17-21 Pannello 42

Liberato G.P., Cornamusini G.*, Zurli L., Conti P., Calver C., Meffre S. & Talarico F.M.: Stratigraphic insights across Permian-Triassic boundary in southern Gondwana: comparison between Victoria Land (Antarctica) and Tasmania (Australia)

17-22 Pannello 43

Liberato G.P., Cornamusini G., Zurli L., Woo J., Corti V., Oh J.-R. & Talarico F.M.*: Sandstones provenance study of the Permian-Triassic sequences at Allan Hills (Victoria Land, Antarctica): evidence from petrographic framework

17-23 Pannello 44

Tolotti R.*, Caffau M., Colizza E. & Sauli C.: Holocene Antarctic Ice Sheet evolution in the Ross Sea: new evidences from the North-Western Basin

17-24 Pannello 45

Zurli L.*, Cornamusini G., Liberato G.P., Talarico F.M., Woo J., Conti P. & Corti V.: Stratigraphic comparison between Victoria Land (Antarctica) and Tasmania (Australia) Late-Palaeozoic glaciogenic sequences

17-25 Pannello 46

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