

12 September 2022, Monday

8.30 Welcoming participants

8.50 Opening of the Workshop

9.00 – 9.30	O'Reilly Suzanne Y. (Keynote)	Imaging lithosphere structure for a sustainable future
9.30 – 9.50	Ciazela Jakub	Melt-mantle reaction, enrichment in metals, and implications for SMS formation
9.50 – 10.10	Mariani Davide	Polyphase pyroxenitization of dunites in the lower continental crust (Ivrea Mafic Complex, Italian Alps)
10.10 – 10.30	Bonadiman Costanza	Probing iron in Earth's lower mantle

10.30 – 10.55 Coffee break

10.55 – 11.15	Puziewicz Jacek	Websterite xenoliths from lavas of the Oku Volcanic Group, Cameroon Volcanic Line (West Africa)
11.15 – 11.35	Schettino Erwin	Metallogenic fingerprint of a metasomatized lithospheric mantle feeding gold endowment in the western Mediterranean basin
11.35 – 11.55	Mattia Bonazzi	Geochemistry and U-Pb geochronology of zircons from diorite to anorthosite dykes intruding the Finero Phlogopite Peridotite (Ivrea-Verbanò Zone): Evidence for a prolonged mantle-derived alkaline magmatism from the Upper Triassic to the Lower Jurassic in the Southern Alps
11.55 – 12.15	Meunier-Mili Neil	Petrologic and microstructural overview of differentiated meteorites, witnesses of mantellic and differentiation processes in primary planetary bodies
12.15 – 12.35	Hillary Downes	Ureilite meteorites: extraterrestrial mantle xenoliths

12.35 – 14.00 Lunch

14.00 – 14.25	Gibson Sally (Invited)	On the role of Earth's lithospheric mantle in global volatile cycles
14.25 – 14.50	Rizzo Andréa (Invited)	The composition of noble gas and CO ₂ in the European subcontinental lithospheric mantle
14.50 – 15.10	Liptai Nora	Genesis of upper mantle pyroxene-hosted amphibole lamellae determined by FPA-FTIR imaging
15.10 – 15.40	Giuliani Andrea	Perturbation of the deep-Earth carbon cycle in response to the Cambrian Explosion

15.40 – 16.10 Coffee break

16.10 – 16.30	O'Neill Hugh	Sulfur in the mantle: geochemistry and petrology
16.30 – 16.50	Casetta Federico	The storage and migration of CO ₂ in the Antarctica sub-continental lithospheric mantle as revealed by ultramafic xenoliths

16.50 – 18.00 Poster session

Asetre Jo-Hannah	Probing the movements of halogens
Ballay Mélanie	Partial melting and refertilization at lithospheric break-up: Insights from the Diamantina Zone (SW Australia)
Boulangier Marine	Melt control on the architecture of the oceanic lithosphere at slow-spreading ridges
Chardelin Marialine	Progressive strain localization in an extensional mantle shear zone (Zabargad, Red Sea)
Ferrand Thomas	Garnet pyroxenites explain high electrical conductivity in the East African deep lithosphere
Ferrando Carlotta	Highly depleted melt segregation recorded in abyssal pyroxenites (Doldrums multi-fault transform system; 8 °N, Mid Atlantic Ridge)
González-Pérez	Mantle metasomatism of Ronda peridotites tracked by Cr-spinel composition
Marioni Simone	Genesis of the Balmuccia peridotite complex (Ivrea zone, European Southern Alps): an 'old' working hypothesis
Mikrut Jakub	Interactions between mantle and infiltrating magmas in SSZ ophiolite - the case of the Kukes Massif (Mirdita Ophiolite, North Albania)
Nishio Ikuya	Compositional data analysis of clinopyroxene from abyssal peridotites
Núñez Elena	Unravelling vesiculation and degassing processes through experimental petrology
Ogunyele Abimbola Chris	Reappraisal of the geodynamic evolution of the mantle massifs of the Ivrea-Verbanò zone based on new field, petrochemical and geochronological data
Sanfilippo Alessio	Nd-Hf isotopic perturbations in melt-modified garnet-pyroxenites (Lanzo North ophiolite, Western Alps)
Sani Camilla	Chemical depletion signature of the abyssal mantle: new Nd-Hf isotopic data of peridotites from the Equatorial Mid Atlantic Ridge
Sideridis Alkiviadis	Petrogenetic insights of the ultra-depleted mantle section of West Chalkidiki, North Greece
Woodland Alan	Experimental study of coupled redox equilibria during peridotite interaction with metasediment and eclogite
Zech Rebecca	New constraints on kimberlite melt compositions using bulk and groundmass compositions

13 September 2022, Thursday

9.00 – 9.30	Yaxley Gregory (Keynote)	The redox state of the cratonic lithospheric upper mantle and experimental demonstration of the formation of diverse mineral assemblages by redox reactions
9.30 – 9.50	Borghini Giulio	An experimental study of trace element redistribution in mantle clinopyroxene via reaction with an Enriched-MORB at 1-2 GPa
9.50 – 10.10	Ezad Isra	Trace element partitioning between phlogopite, apatite, amphibole and silicate melts in high-pressure experiments
10.10 – 10.30	Ananuer Halimulati	The dry but "Wet" mantle
10.30 – 10.55	Coffee break	
10.55 – 11.15	Secchiari Arianna	Geochemical variability of mantle rocks drilled in an ocean-continent transition: new insights from the Iberian margin peridotites (ODP Leg 149 and 173)
11.15 – 11.35	Montanini Alessandra	Mantle pyroxenites in a young subduction system: the New Caledonia record
11.35 – 11.55	Koutsovitis Petros	Significant refertilization of the Krrabi massif depleted mantle peridotites in the Mirdita ophiolite complex, Albania
11.55 – 12.15	Muckensturm Noé	Petrology and microstructures of the mantle-crust transition zone from the North Patagonian massif
12.15 – 12.35	Kaczmarek Mary-Alix	Major mylonitic shear-zones in the mantle section of the Oman ophiolite: witnesses of oceanic accretion, intra-oceanic thrusting, or both?
12.35 – 14.00	Lunch	
14.00 – 14.25	Matusiak-Malek Magdalena (Invited)	Evolution of upper mantle and lower crust beneath Southern Uplands and Midland Valley Terranes (South Scotland) as recorded by peridotitic and pyroxenitic xenoliths in alkaline mafic lavas
14.25 – 14.50	Gaillard Fabrice (Invited)	Electrical Petrology to decipher the melt contents of mantle magmatic reservoirs
14.50 – 15.10	Cordier Patrick	Creep in the mantle: dislocations? vacancies? both?
15.10 – 15.35	Coffee break	
15.35 – 15.55	Tommasi Andrea	Revisiting the role of fluids on the deformation of the lithospheric mantle
15.55 – 16.15	Chardelin Marialine	Feedbacks between melt transport and deformation in the mantle root of an island arc (Sapat peridotites, Kohistan arc)
16.15 – 16.35	Sudholz Zachary	Towards an Integrated Understanding of the Mid-lithosphere Discontinuity
16.35 – 16.55	Faccincani Luca	Effect of OH-incorporation on the elastic properties and sound wave velocities of Fo-90 olivine
16.55 – 18.00	Poster session	
	Alard Olivier	Olivine, let's talk about the elephant in the mantle room
	Buczko Daniel	Oceanic affinity of spinel facies orogenic peridotites of the Seve Nappe Complex - implications for the Caledonian Wilson cycle in the Scandinavia region
	Casetta Federico	Reconstructing the liquid line of descent of the Udachnaya kimberlite and the interaction between kimberlite melts and the Siberian sub-cratonic lithospheric mantle
	Decrausaz Thierry	Peridotite carbonation and listvenite formation in Oman: insights from combined mineralogical, geochemical and C-O-Fe-Zn isotopes studies
	Heckel Catharina	Metasomatism-deformation-cycle: Connecting deformation and metasomatism in the lithospheric, cratonic mantle
	Henry Hadrien	The evolution of gabbros microstructures: investigation of the twin-laws of plagioclase during plastic deformation at the mid-Atlantic ridge
	Kukula Anna	Peridotitic xenoliths from Mt. Bar - insight into the lithospheric mantle beneath Devès volcanic field (Massif Central, France): preliminary data
	Lange Thomas Pieter	Nanoscale amphibole formation and growth in the lithospheric mantle
	Marciniak Dariusz	Metal migration and isotope (Fe, S) fractionation through an oceanic crust-mantle transition zone (ICDP OmanDP)
	Mazurek Hubert	The origin of sulfides in lithospheric mantle xenoliths from Lower Silesia (Poland)
	Nardini Nicolo	Clinopyroxenitic xenoliths from the Latemar area (Dolomites) as the key to the reconstruction of early differentiation stages of Middle Triassic magmas in the Southern Alps
	Patko Levente	Constraining the conditions of iron-wehrlite formation via melt-rock reactions in the mantle lithosphere
	Phillips Matthew	Germanium mineral/melt partition coefficients
	Ramokgaba Lesego	Direct evidence of natural carbonate-silicate incipient melts in Kaapvaal lithosphere xenoliths
	Ventura Bordenca Claudio	Combining petrology, noble gas geochemistry and CO ₂ abundance to constrain the mantle features recorded in ultramafic mantle xenoliths from La Grille volcano (Grande Comore Island, western Indian Ocean)
	Zanetti Alberto	The subcontinental lithospheric mantle under the Alto Paranaíba Alkaline Province: the story told by garnet and peridotite xenoliths enclosed in the Três Ranchos kimberlite, Brazil
	Ziobro-Mikrut Malgorzata	The lithospheric mantle beneath Devès volcanic field - case study of mantle xenoliths from Mt. Briançon (Massif Central, France)
19.45	Conference dinner	

14 September 2022, Wednesday

9.00 – 9.30	Mc Cammon Catherine (Keynote)	Earth's volatile cycles - past, present and future
9.30 – 9.50	Audran Bastien	Serpentinization in the Ronda Massif (Spain): structures, mineralogy, metal mobilities
9.50 – 10.10	Osselin Florian	Reactive transport experiments of serpentinization and carbonation in natural serpentinites. Implications for hydrogen generation and carbon mineralization
10.10 – 10.30	Godard Marguerite	Serpentinization and hydrogen budget of lherzolites from North-Western Pyrénées
10.30 – 10.55	Coffee break	
10.55 – 11.15	Tilhac Romain	A global review of Hf-Nd isotopes: new perspectives on the chicken-and-egg debate on ancient mantle signatures
11.15 – 11.35	Ionov Dimitri	Os-Sr-Nd isotope and chemical effects of alkali-feldspar metasomatism on the lithospheric mantle near the Asian Pacific margin
11.35 – 11.55	Ogunyele Abimbola Chris	Change of the Mantle sources of Early Mesozoic magmatism of Southern Alps: evidence from geochemistry and geochronology of alkali-rich dykes from Finero
11.55 – 12.15	Borisova Anastassia	Zircon-bearing albitites in orogenic lherzolites of Pyrénées (France): new data on U-Pb ages, trace element signatures and physical-chemical conditions
12.15 – 12.35	Gorojovsky Lauren	The oxidation state of the upper mantle
12.35 – 14.00	Lunch	
14.00 – 15.30	Final discussion and closing of the Workshop	