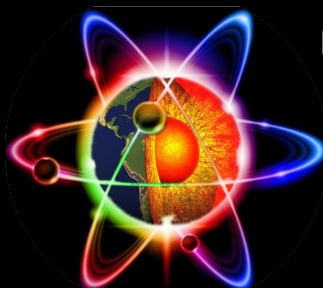


First Earth Sciences PhD Days

07-08 September 2017
Pisa (Italy)



Department of Earth Sciences
University of Pisa
Aula C

 Geosciences:
a tool in a changing world

PROGRAM

8.00-8.30 Opening Day 1

Multi-scale approach to reconstruct the geodynamics of collisional belts

Chair: Maria Di Rosa (Pisa) - Marco Scarsi (Genova)

- 8.30-8.45 Satellite gravimetry as a proxy for the lithospheric thermal structure: sensitivity analysis and first results - Alberto Pastorutti (Trieste)
- 8.45-9.00 Seismic sequences analysis via seismological data, DInSAR and numerical modeling: the 2016 Norcia earthquake - Emanuela Valerio (Roma La Sapienza)
- 9.00-9.15 Ductile-brittle transition at shallow crustal level: the case study of the Calamita Unit (Elba Island, Italy) - Samuele Papeschi (Pisa - Firenze)
- 9.15-9.30 Shear deformation in the eastern sector of the Southern European Variscan Chain: vorticity of the flow, strain analysis and geochronology - Matteo Simonetti (Torino)
- 9.30-9.45 How does Quartz respond to deviatoric stresses? Ab initio calculations on SiO₂ tectosilicate - Mara Murri (Pavia)
- 9.45-10.00 Faulting, fluid-rock interaction and hydrothermal mineralization in ultramafic rocks (Voltri Massif, Ligurian Alps) - Marco Scarsi (Genova)
- 10.00-10.30 *Coffee Break*
- 10.30-10.45 Breaking plates: the tectono-thermal evolution of continental margins during rifting and hyper-extension - Cristophe Real (Torino)
- 10.45-11.00 Nappe stacking and metamorphic evolution in the Western Tauern Window - Alessandro Da Mommio (Milano)
- 11.00-11.15 Elastic geobarometry: the strain and the stress distribution in the host-inclusion system revealed by Finite Element Modeling (FEM) - Mattia Mazzucchelli (Pavia)
- 11.15-11.30 Towards a reliable equation of state for zircon - Gabriele Zaffiro (Pavia)
- 11.30-11.45 Tectono-metamorphic evolution of the continental units at the boundary between the Alpine and Variscan Corsica: constraints for the exhumation models in the continental subduction setting - Maria Di Rosa (Pisa)
- 11.45-12.00 Deciphering the polymetamorphic history of Jubrique Sequence (Betic Cordillera, Spain) - Marco Crivellaro (Padova)
- 12.00-12.30 **Round Table**

Global geochemical cycle of volatiles from exosphere to the the deep Earth

Chair: Giulia Rapa (Torino) - Luca Pellegrino (Milano Bicocca)

- 14.30-14.45 On the interior of carbon rich exoplanets: new insights from Si-C system at ultra-high pressure - Francesca Miozzi (Parigi)
- 14.45-15.00 Metamorphism and CO₂-production in collisional orogens: case studies from the Himalayas - Giulia Rapa (Torino)
- 15.00-15.15 Laumontite has a possible host for CO₂; where we are and how to improve - Davide Comboni (Milano)
- 15.15-15.30 The amphibole as a proxy for the secular variations into the deep cycle of the volatile elements - Gianluca Sessa (Milano)
- 15.30-16.00 *Coffee Break*

- 16.00-16.15 High-Pressure rock carbonation: implications for the reactivity of C-bearing fluids and the magnitude of fluid flow in the subducting slab - Francesca Piccoli (Parigi)
- 16.15-16.30 Modelling of mechanical mixing and chemical interaction between the subducting crust and the overlying mantle at (ultra)high pressures: implications for the slab-to-mantle mass transfer – Luca Pellegrino (Milano Bicocca)
- 16.30-16.45 Experimental study of interconnectivity of hydrous carbonatitic melts and grain boundary wetness in mantle peridotite – Luca Capizzi (Milano)
- 16.45-17.15 **Round Table**

8.00-8.30 Opening Day 2

Geochemistry as a multidisciplinary tool to investigate geological processes

Chair: Sirio Consani (Genova) - Stefano Pagnotta (Pisa)

- 8.30-8.45 Hydrogeochemical contribution to the knowledge of the multilayered aquifer of the Pisa alluvial plain – Marica Belgiojorno (Pisa)
- 8.45-9.00 Hydrogeological partitioning of the «Pale di San Martino» unit and definition of groundwater flow paths - Marco Bonat (Roma Tre)
- 9.00-9.15 Petrological and geochronological study of the lithospheric mantle domain underneath the Veneto Volcanic Province – Valentina Brombin (Ferrara)
- 9.15-9.30 Heterogeneity in the MORB sources: geochemical and isotopic study of Alpine ophiolitic peridotites – Tancredi Rumbolo (Parma)
- 9.30-9.45 Chromium and arsenic removal from contaminated waters: environmental application of maghemite nanoparticles – Simone Molinari (Padova)
- 9.45-10.00 Geochronology and kinematics of crustal shear zones in the Himalayan collisional belt – Chiara Montemagni (Milano Bicocca)
- 10.00-10.15 Surface exploration and petrological applications in high enthalpy geothermal areas: a multidisciplinary approach for the Cerro Pabellón project (northern Chile) – Marco Taussi (Urbino)
- 10.15-10.30 Azobenzene/AlPO₄-5 hybrid composites: synthesis, non-ambient stability and organization of the photoactive molecules – Michelangelo Polisi (Modena e Reggio Emilia)
- 10.30-10.45 *Coffee Break*
- 10.45-11.00 Interactions between minerals, contaminants and microorganisms in Acid mine Drainage Settings – Sirio Consani (Genova)
- 11.00-11.15 Modellazione numerica della dispersione degli inquinanti e piattaforma web-based per il monitoraggio ambientale a supporto di un intervento di bonifica mineraria – Pier Andrea Marras (Cagliari)
- 11.15-11.30 Cristallochimica delle fasi secondarie prodotte dall'alterazione della mineralizzazione a pirite tallifera delle Alpi Apuane (Toscana, Italia) – Daniela Mauro (Pisa)
- 11.30-11.45 Potentially Toxic Elements (PTEs) in serpentine soils and bedrocks: a case study from Ligurian ophiolites – Silvia Fornasaro (Genova)
- 11.45-12.00 The metallurgical slags of southern Tuscany and Elba Island: geochemical characterisation and environmental impact on soils – Irene Rocchi (Pisa)
- 12.00-12.15 Innovative multi-analytical approach to investigate complex mixtures of calcium phosphates crystallized on Carrara marble after ammonium phosphate treatments – Elena Possenti (Milano)
- 12.15-12.30 μ -LIBS in mineralogical and petrographic applications for cultural heritage – Stefano Pagnotta (Pisa)
- 12.30-13.00 **Round Table**

Organisers:

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