NEWLETTER NR 0, 2023

GEOSED NEWSLETTER

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Coordinator's letter

Dear GeoSed members and sympathisers,
We are glad to launch our last – chronologically speaking – initiative: the Newsletter. The latter, promoted and edited by Irene Cornacchia, is meant as a tool to informally share the ongoing projects and to keep everybody updated about the most recent researches of the active and diverse community of Italian sedimentologists and stratigraphers belonging to the GeoSed section of the Italian Geological Society. The coordinating committee imagined it as a way to foster exchanges of ideas and promoting new collaborations, helping the entire community to grow and spread. Despite we are aware that this newsletter does not show a comprehensive picture of all the sedimentological and stratigraphic researches going on in Italy, we are pleased to say that tens of colleagues responded to our call and proactively contributed to its very first number, full of contents. Since the positive response to this first call, for which we do thank all the colleagues that contributed, we are already working on how to improve the next number. In this regard, a format to fill will be sent to you before the next GeoSed Meeting "VIII Incontri di Geologia", to be held in Rome the 30th of November, when further details will be given.
For the time being, seat back, relax, and enjoy the newsletter!

Marcello Tropeano and the GeoSed committee

Secretary's letter

Yes, here I am! I know that sometimes the continuous sending email process seems as something probably similar to a clinical problem... but is not true!
We are a vibrant scientific community and for this reason we cannot stop our work!!
Geosed represents an important reference point for all the Italian sedimentologist and also for the geological community. When I was a PhD student Gesoed was "a place to be", something where the multidisciplinary approaches and geological knowledge were shared and discussed with professor, colleagues, researcher and student of any age.
Now that I am the secretary of this incredible community, I feel the weight (also the pleasure c'mon!) to continue the incredible work performed by the previous secretary that for my luck is still with me in this moment, guiding my activity (thank you for all Amalia!).
The promotion of the main activities strictly related to the sedimentary geology, with more emphasis especially on the PhD students, with the door always open to the entire community that wants to share its knowledge, will be one of the most important aims of my job as secretary... it will be a pleasure!
GeoSed, in my opinion, must continue to be a training ground especially for the young sedimentologists and geologists... and this will be all my effort...

All the best

Alessandro Mancini

Committee Members

COORDINATOR
Marcello Tropeano

SECRETARIES
Alessandro Mancini,
Amalia Spina

TREASURER
Sabrina Amodio

COMMITTEE
Agata Di Stefano,
Ivan Martini,
Luigi Bruno,
Irene Cornacchia

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This number has been edited by Irene Cornacchia.
Cover photo is a view of the Monte Pescofalcone from Monte Cavallo, Maiella Mountain, Central Italy.
Photo by Irene Cornacchia

GeoSed Awards Winners

Winner for the best fieldtrip guide of 2022

Alessandro Mancini (Università di Roma La Sapienza) was awarded of the **"Best field geological guide of 2022"** price for the guide *"Travertine depositional systems of Central Italy: Rapolano Terme and the Acque Albule Basin. An overview of geometries and lithofacies associations from spring to distal part of the depositional setting"*. Authors: Alessandro Mancini & Enrico Capezzuoli.

News and upcoming events

Congresses and Workshops

- The **17th Bathurst Meeting - International Meeting of Carbonate Sedimentologists** will be held in Napoli from the 5th to the 7th of September 2023. Further information areavailable on the website **BATHURST 2023 :: Welcome (azuleon.org)**
- The **Joint Congress SIMP, SGI, SOGEI e AIV** will be held in Potenza from the 19th to the 21th of September 2023 settembre. Further information are available on the website **https://www.geoscienze.org/potenza2023/**

Social Media

You can follow the ongoing activities of the GeoSed on the dedicated page of the Italian Geological Society website, or on our social pages.

- **Sito web:** *GeoSed (socgeol.it)*
- **Facebook:** *Geosed - Associazione Italiana per la Geologia del Sedimentario | Facebook*
- **Instagram** *geoseditalia*

Members' research topics

Luca Aldega (Università La Sapienza di Roma)

- Burial history and exhumation of sedimentary basins and evaluation of the petroleum system
- Diagenesis and very low-grade metamorphism of pelite and mudstone
- Thermal and tectonic evolution of fold-and-thrust belts
- Correlation between paleothermal indicators derived from clay minerals, organic matter and fluid inclusions
- Evaluation of coseismic activity of faults combining petrophysical and mineralogical features of fault rocks with K-Ar dating of synkinematic clay minerals
- Evaluation of seal and reservoir rocks for geothermal exploration by integrating stratigraphic and structural geology, fluid inclusions, X-ray diffraction of clay minerals and vitrinite reflectance.

Sabrina Amodio (Università degli Studi di Napoli "Parthenope")

- Jurassic-Cretaceous shallow-water carbonates: sedimentology, biostratigraphy and facies analysis. Controlling factor on stratigraphic architecture of coastal-shelf depositional systems by cyclostratigraphy and sequence stratigraphy. Climatic and oceanographic changes by chemostratigraphic tools. Biotic response to abrupt climate changes and C-cycle pertubations.
- Quaternary coastal-shelf depositional systems off the Campania region: marine geology, stratigraphy and sequence stratigraphy. Sea-level changes and their impact on clastic shelfs and coastal plains. Sedimentologic and geomorphologic indicators of past sea levels. Landscape reconstructions.

Enrico Capezzuoli (Università degli Studi di Firenze)

- Study of continental carbonate deposits derived from mineral waters (travertine, tufa, sinter...) and their relationship with tectonics, climate and geothermal energy.
- Stratigraphic/sedimentological characterization of the Palaeozoic basement of the Northern Apennines: implications in the orogenic architecture and correlation with coeval deposits in Italy and abroad.

Alessandro Paolo Carniti (Università degli Studi di Milano)

- Il progetto di ricerca del mio dottorato è volto allo studio dell'architettura di facies e della fauna a brachiopodi di mud mound carbonatici Mississippiani in Derbyshire, Inghilterra. Il mio interesse per lo studio della sedimentologia e paleoecologia dei reef si espande tuttavia a tutto il record geologico.

Sabatino Ciarcia (Università degli Studi del Sannio)

- Tectonostratigraphic and kinematic evolution of the southern Apennines and Calabrian Arc (Italy) and Rif (Morocco).
- Facies analysis and Wedge-top basins sedimentary evolution.
- Geological cartography.

Irene Cornacchia (Consiglio Nazionale delle Ricerche)

- Facies and microfacies studies on Cenozoic shallow-water limestones of the Central Mediterranean area.
- Carbon and oxygen isotope stratigraphy for the identification of paleoclimate cahnges and carbon cycle perturbations during the Cenozoic.
- Study of the Sr and Nd isotope systematics across the Miocene, Central Mediterranean carbonate records for paleoceanographic recosntructions as well as to idetify the dynamics between volcanism and carbonate production changes.

Gianluca Cornamusini

- Stratigrafia, analisi di provenienza, paleoambientali e paleoclimatiche di sequenze Gondwaniane glacigeniche e fluviali (Antartide e Tasmania)
- Rapporti tra tettonica e sedimentazione in aree di catena (Appennino Tosco-Emiliano)
- Forcing tettonici e climatici nelle successioni dei bacini neogenici toscani
- Stratigrafia applicata alla cartografia geologica

Luca G. Costamagna (Università degli Studi di Cagliari)

- Sedimentology and architectural and paleoenvironmental analysis of the Late Paleozoic, Mesozoic, and Cenozoic continental successions of Sardinia, particularly regarding the continental systems and their transition to the marine environment.
- Geometries, characteristics, and comparisons of the different sedimentary transgressions.
- Compositional and provenance analyses of continental deposits from the post-Variscan age to the Paleogene.
- Depositional features of the Mesozoic carbonate platforms.

Salvatore Critelli, Mario Borrelli, Sara Criniti, Massimo Civitelli, Giacomo Mangano e Ettore Falsetta (Università della Calabria)

- The Research team (RT) works on sedimentary processes and provenance relations in ancient and modern continental versus deep-marine environments, and on paleogeographic and paleotectonic evolution of Circum-Mediterranean Region and other extra-European regions.
- The RT has conducting and published research in diverse field areas and geotectonic settings including Southern Apennines; Sicily; Spain; Makran accretionary prism, SW Pakistan; Himalaya (Pakistan, India, Nepal); Southern and Central California; Baja California (Mexico); Spitsbergen (Svalbard), Norway; Rif Chain, northern Moroc; Greece, Bulgaria and Turkey; Iran.
- The RT works mainly on sand(stone): Provenance, diagenesis, modeling; effects of weathering, lithology, transport and depositional environment on composition of sand; volcaniclastic sediment: interpretation of syneruptive vs. posteruptive, neovolcanic vs. paleovolcanic and intrabasinal vs. extrabasinal sand grains; Palaeogeographic and Palaeotectonic reconstructions; Basin Analysis; Foreland Basins and Accretionary Wedge, Rifting and divergent margin basins Strike-slip basins.

Francesco Dela Pierre, Marcello Natalicchio, Luca Pellegrino, Enrico Nallino (Università degli Studi di Torino)

- The main research interests of the group are: 1) sedimentology of the evaporite deposits of the Mediterranean area and associated biogenic deposits (sapropels, diatomites, microbialites) with the aim of reconstructing the paleoenvironment, the biological and diagenetic processes, the relation with carbon, sulfur and silicon biogeochemical cycles; 2) abiotic and biological-driven processes related to the formation of ancient methane-derived carbonates in the sedimentary column and at the seafloor (cold seep deposits).

Giovanna Della Porta (Università degli Studi di Milano)

- Depositional facies character and architecture, geometry, diagenesis and stable isotope geochemistry of carbonate platforms through the Phanerozoic with specific focus on the role played by microbial carbonates.
- Processes and products of abiotic and microbially-mediated precipitation in lacustrine carbonates and travertines.

Marco Franceschi (Università degli Studi di Trieste)

- Stratigraphy and carbonate sedimentology of Mesozoic and Cenozoic rocks.
- Variations of carbonate production rates over geological time.
- Understanding the causes of the changes observed in depositional systems (particularly marine carbonate, but also continental) in coincidence with major perturbations of the δ13C record (p .e. CPE, SPBE, PETM). In tacking these research topics, I use an integrated quantitative approach that combines stratigraphy, biostratigraphy, geochemistry and three-dimensional geological modelling.

Piero Gianolla (Università degli Studi di Ferrara)

- Sequence Stratigraphic methodologies;
- Triassic Stratigraphy of the Tethyan Domain;
- Sedimentology of Carbonate Platforms and Mixed Basins;
- Paleoclimatology of Early Mesozoic;
- Geoheritage, Geodiversity and Geoconservation.
- In recent years one of the most promising lines of research in terms of scientific impact is the reconstruction of the palaeoclimate during Late Triassic (Carnian). This research concerns the recognition of primary and secondary climate indicators and their impact on a global scale. I am also involved in several mapping projects in the Southern Alps (CARG Project) and in different projects dealing with the definition and conservation of geological Heritage in Italy and Europe.

Alessandro Mancini (Università degli Studi di Roma La Sapienza)

- Geological mapping of the Cretaceous carbonate platform deposits of the Ausoni Mts. (CARG Sheet 414_Terracina). Facies analysis and reconstruction of the depositional geometries.
- Study of continental carbonates deposits. Geochemistry, facies analysis and stratigraphic reconstruction.
- Study of the relationships between continental calcium carbonate precipitation, geogenic CO2 emissions in subaerial setting and volcanic activity.

Marco Mancini (Consiglio Nazionale delle Ricerche)

- Physical stratigraphy and sedimentology of terrigenous and mixed carbonate-siliciclastic alluvial, coastal and lacustrine depositional systems: their mapping and implications on natural risks' assessment and palaeo-environmental reconstructions.

Ivan Martini (Università degli Studi di Siena)

- Coastal and deltaic depositional systems, siliciclastic sedimentation in caves, human impact on continental, paralic and marine depositional system.

Luca Martire, Anna D'Atri, Carlo Bertok (Università degli Studi di Torino)

- Petrographic, geochemical and geochronologic study of fossil hydrothermal systems associated to sulfide, fluorite and barite mineralizations in the Triassic carbonate successions. of two mining districts in the Southalpine Domain (Pian dei Resinelli, Lecco; Gorno, Bergamo). Financed by Fondo di Ricerca Locale 2022, Grant for Internationalization of the Torino University, and by Vedra Metals Srl.
- Stratigraphic, petrographic and geochemical study of diagenetic processes (dolomitization, silicization) associated to hydrothermal circulation in Mesozoic extensional settings in the Briançonnais and Pre-Piemontese Domains of the Ligurian Alps. Financed by Fondo di Ricerca Locale 2022 of the Torino University.
- Geological mapping, stratigraphy and petrography of the Oligo-Miocene sandstones in the eastern sector of the Tertiary Piemonte Basin, in the context of the realization of the CARG sheet "Novi Ligure". Financed by CARG project.
- Petrography of sedimentary rocks applied to issues of biodegradation and biodeterioration of cultural heritage artifacts made of stone materials (in collaboration with colleagues of the Biology Department of the Torino University).

Monica Pondrelli (Università degli Studi "G. D'Annunzio" Chieti-Pescara)

- Analisi dei bacini sedimentari associati alla presenza di acqua su Marte: processi deposizionali e ambienti d formazione.
- Successione dell'Ordoviciano Superiore-Carbonifero Inferiore delle Alpi Carniche (Austria-Italia).

Sedimentology and Stratigraphy Group (SedStrat) (University of Perugia)
Simonetta Cirilli, Roberto Rettori, Amalia Spina, Andrea Sorci, Nicola Mitillo, Marco Urbani, Haidra Saleh

- Sedimentology and sequence stratigraphy of marine carbonate and mixed carbonate-siliciclastic depositional environments.
- Paleoclimate and Paleogeographic reconstructions (Palaeozoic - lower Mesozoic).
- Carbonate sedimentology and diagenesis. Chemical and petrophysical characterization of sedimentary rocks for capture, gas/fluid storage and reutilization (e.g. CO2, Hydrogen).
- Thermal maturity of Organic Matter by optical and spectroscopical analyses
- Palaeoclimatic reconstructions of the last 2000 years by FTIR and palynological analysis calibrated with chemostratigraphy and biostratigraphy.
- The RG has conducting and published research in diverse field areas settings including Apennines; Southern Alps, Portugal, Spain, Morocco, Tunisia, Turkey, Iran, USA, China.

Stratigraphy and Sedimentology Group – DSCG Unimore
Daniela Fontana, Luigi Bruno, Luca Demurtas

- Stratigraphy and Geological Mapping of Quaternary deposits of the Po Basin.
- Evolution of the Po River system since the Middle-Pleistocene through the integration of stratigraphic, compositional and geoarcheological studies.
- Influence of subsurface stratigraphic architecture on co-seismic sand liquefaction

Università degli Studi Roma 3
Paola Cipollari, Domenico Cosentino, Anas Abbassi, Gianmarco Mondati, Marco Liberatore

- Studio di successioni neogeniche dell'area mediterranea.
- Analisi dei bacini sedimentari sin-tettonici legati all'orogenesi appenninica.
- Crisi di salinità del Messiniano nell'area mediterranea.
- Cartografia geologica.

Chiara Zuffetti (Università degli Studi di Milano)

- Reconstructing the architecture and evolution of clastic sedimentary basins, ranging from field-based geological mapping to 3D geomodelling. Chiara's current works are:
  - i) characterizing and modelling hydro-stratigraphy at multiple scales, both of mountain ranges and in Quaternary alluvial settings (Italy, Switzerland);
  - ii) reconstructing architecture and evolution of Miocene turbidite systems (Morocco).

Ongoing and submitted projects

- Analisi stratigrafico-strutturale dei bacini intermontani plio-quaternari dell'Appennino centrale **Università Roma Tre**
- **"Biota resilience to global change: biomineralization of planktic and benthic calcifiers in the past, present and future."** PRIN2017: RU Milano, PI: prof. Elisabetta Erba; RU Napoli, AI: prof. Mariano Parente, Università degli Studi di Napoli Federico II, Dip. DISTAR. (ongoing) **Sabrina Amodio**
- **CARG Sheet 044** - Predazzo (ongoing) **Piero Gianolla**
- **CARG Sheet 88** "Gorizia", 110 of the Carta Geologica d'Italia sclae 1:50000 – role: direttore del rilevamento del substrato roccioso (ongoing) **Marco Franceschi**
- **CARG Sheet 110** "Trieste" of the Carta Geologica d'Italia at 1:50000 scale – role: direttore del rilevamento del substrato roccioso (ongoing) **Marco Franceschi**
- **CARG Sheet 130 "**Caresana" of the Carta Geologica d'Italia at 1:50000 scale – role: direttore del rilevamento del substrato roccioso (ongoing) **Marco Franceschi**
- **AHFBS CARG sheet 184** (co-coorditing) and partecipation to the CARG Sheets 183 and 185 of the Carta Geologica d'Italia, scale 1:50.000. (ongoing) **UNIMORE**
- **CARG Sheet 249** "Massa Carrara" – 2022 (ongoing) **Gianluca Cornamusini**
- **CARG Foglio 286** -"Poggibonsi" - 2021 (ongoing) **Gianluca Cornamusini**
- **CARG Foglio 364** - Bracciano (ongoing) **Università Roma Tre**
- **CARG Sheet 404** "Isernia". Resp. prof. Carmen Rosskopf - Università degli Studi del Molise**.** (ongoing) **Sabrina Amodio**
- **CARG Sheet 418** "Piedimonte Matese". Resp. prof. Gerardo Pappone, Università degli studi di Napoli Parthenope, Dip. di Scienze e Tecnologie. (ongoing) **Sabrina Amodio**
- **CARG Sheet** "Novi Ligure" (ongoing) **Luca Martire's group**
- **CARG 1:50.000** Geological Map of Italy for Sheet "Bisignano". (ongoing) Project Coordinator **Salvatore Critelli**
- **CNR DTA.AD003.316 –** Terraced systems and incised valleys: stratigraphic reconstructions and implications on geohazards (ongoing). Project leader: **Marco Mancini**
- **ECORD-IODP 2021** "TrigGeR mechanisms of Antarctic ice sheet INStability across the Plio-pLeistocene trAnsitIoN – GRAINSPLAIN" **Gianluca Cornamusini**
- **EMPT** nel Mediterraneo orientale (Anatolia meridionale) **Università Roma Tre**
- **ENI-UNICAL Project:** "Geological Modes and Geodynamics of the Crotone Basin" financial supported by ENI E&P (ongoing). **Salvatore Critelli**
- **ERC Consolidator Grant:** MITIGATE - Mitigate anthropogenic pressures on sandy shorelines thanks to a sedimentary geology-based approach (submitted). **Ivan Martini**

- “Evaluation and Improvement of Methods to Consider Influence of Surface Clay Layers on Liquefaction-Induced Settlement **CLIQUEST”** (ongoing) **UNIMORE**
- **FIR:** Metodi sperimentali di architettura deposizionale ed analisi composizionale di depositi continentali /transizionali della Sardegna per ricostruzioni paleoambientali (ongoing). **Luca G. Costamagna**
- **FIS (Fondo Italiano per la Scienza): WAVEDELTAS** - Influence of sea-level rise on wave-dominated Deltas (submitted) **Ivan Martini**
- **F-LAB 2022: GEA** - Investigating Geological Environmental & Archaeological matrices through pXRF and magnetic susceptibility (funded). **Ivan Martini**
- **GeoPlaNet-SP Erasmus+ KA203** - Strategic Partnerships for higher education. EU competitive project. Programma Erasmus+ dell'Unione Europea. (ongoing) https://geoplanet-sp.eu/en/ **Monica Pondrelli**
- **GEO-TRAV**: using travertines and thermal springs in reconstructing geothermal system and its sustainable development. Project MAECI-MOST together with China (submitted). **Enrico Capezzuoli**
- **IDROMONT Project.** Characterisation of groundwater bodies in the mountainous areas of Lombardy Region, aimed to the protection and management of groundwater resources; GIS geo-database implementation, tectono-(hydro-) stratigraphic reconstruction, 3D geomodelling. Leader: Prof. M. Masetti – University of Milan-IT (ongoing). **Chiara Zuffetti**
- **INTERREG Italia/Slovenia** CARSO-KRAS II. Role: member of research team (ongoing). **Marco Franceschi**
- **LEMON Project.** Networking with ECRs on Landscape Evolution triggering mechanisms; organization of INQUA winter school in Palermo-IT. Leader: E. Srivastava – Indian Institute of Technology Kanpur-IND (ongoing). **Chiara Zuffetti**
- **MODEL-PROSAM**: Analisi e modellizzazione 2D delle aree a rischio di catastrofi naturali geomarine e quantificazione dell’erosione costiera delle zone litorali delle province meridionali del Sahara marocchino. **Università di Roma Tre**
- Movimenti verticali olocenici delle zone costiere del Mediterraneo centrale e orientale **Università di Roma Tre**
- **“New evaporite records from the Eastern and Western Mediterranean: contributions to the evolution of the last saline giant and opportunities for the energy transition”** (ongoing). Principal Investigator: Prof. Gibert, University of Barcelona, Spain; 2021-2024) **Francesco Dela Pierre's group.**
- **NFSC China 2022:** Geological-environmental event footprint in the Jiuzhaigou-Huanglong travertine on the eastern margin of the Qinghai-Tibet Plateau (ongoing). **Enrico Capezzuoli**

- Oceanographic and climatic changes during the onset of the Late Palaeozoic Ice Age (Mississippian-Early Pennsylvanian): the pelagic record of the N Spain (Cantabrian Mountains). **Giovanna Della Porta**
- **PERL** - Collaboration Agreement between Emilia-Romagna Region, Terre del Reno Municipality, CNR-IGAG and University of Cassino to define a multilevel strategy to assess the liquefaction risk of embankments in complex geological and morphological settings (ongoing) Role: partecipant **Marco Mancini**
- **Phenix Project.** Geological field surveys on glacio-fluvial deposits in Aare valley (Switzerland); sedimentological and (hydro-) stratigraphic reconstruction; geophysical surveys; geomodelling . Leader: Prof. P. Renard – University of Neuchatel-CH. (ongoing) **Chiara Zuffetti**
- **PNRA_2022** "The Antarctic record of the Late Paleozoic Ice Age through Victoria Land glacial sedimentary systems as a model of global climate scenarios for icehouse to greenhouse transition" (submitted) **Gianluca Cornamusini**
- **PNRA19_00120** "The response of the sedimentary system through Permian to Jurassic abrupt climatic and provenance changes in Northern Victoria Land" (ongoing) **Gianluca Cornamusini**
- **PNRA18_00233** "Antarctic Ice Sheets' dynamics: new data from provenance and paleontological analysis of IODP374 and DSDP Leg28 cores in the Ross Sea" (ongoing) **Gianluca Cornamusini**
- **PRIN 2022 PNRR** Multidisciplinary study of nonvolcanic CO2 degassing in the southern Apennines: definition of the buried reservoirs and seeping mechanisms (submitted) Role: Associated Investigator **Sabatino Ciarcia**
- **PRIN 2022 PNRR** "Impact of Early-Middle Miocene climate perturbation on Mediterranean marine ecosystem" (submitted) **Gianluca Cornamusini**
- **PRIN 2022** The "Argille Varicolori" in the central-southern Apennines and Calabrian Arc: multidisciplinary approach and new constraints in the evolution of the peri-Mediterranean chains (submitted). **Sabatino Ciarcia**
- **PRIN_2022** "Climatic impact on terrestrial and marine realms of the eastern Mediterranean at the Plio-Pleistocene transition" (submitted). **Gianluca Cornamusini**
- **PRIN 2022** "CPE Drilling Project: digging into Triassic extreme climate change (CDP)"– ruolo: responsabile dell'unità di ricerca di UniTS (submitted). **Marco Franceschi**

- **PRIN 2022 DEEP PAST:** DEtailing thE Palaeogeography of Southern PAlaeoeurope by meanS of biosTratigraphic correlation and basin development in the Palaeozoic to early Mesozoic time-frame: case histories from the Italian record (submitted). **Enrico Capezzuoli**
- **PRIN 2022: PPT_IMPACT** - Climatic impact on terrestrial and marine realms of the eastern Mediterranean at the Plio-Pleistocene transition (submitted). **Ivan Martini**
- **PRIN 2022 PNRR: FATE_COASTS -** Biotic and abiotic early proxies to predict fate of coasts under the effect of human and climate pressure (submitted). **Ivan Martini**
- **PRIN 2022**: Source-to-sink analysis of extensional back-arc domains: the Srednogorie (Bulgaria) and Adjara-Trialeti (Georgia) sedimentary basins (submitted). **Salvatore Critelli**
- **PRIN 2022: BERMS** - Beach EnviRonMentS: towards a holistic approach for the study of sandy beaches (submitted). **Salvatore Critelli**
- **PRIN 2022 - CDP** "CPE Drilling Project: digging into Triassic extreme climate change" (submitted) **Piero Gianolla**
- **PRIN_2020 POEM -** POligEnetic Mélanges: anatomy, significance and societal impact (ongoing) **Gianluca Cornamusini**
- **PRIN 2020** - Fault Architecture in Space and Time – “FAST”. Role: Principal investigator of the Sapienza research unit (finanziamento 187.121 euro). **Luca Aldega**
- Processes of carbonate precipitation in hydrothermal travertine from Central Italy: abiotic vs. microbially mediated and organomineralic carbonate precipitation in extreme environments. **Giovanna Della Porta**
- Responsible of the local Unit, Coordinator of the University of Calabria and member of the Scientific Committee of the District basin authority of the southern Apennines **(Autorità di bacino Distrettuale dell'Appennino meridionale)** **Salvatore Critelli**
- **Sapienza project 2020 -** Constraining rates and mechanisms of vertical movements of orogenic belts in space and through time by thermal and geochronological evolution of sedimentary successions and fault rocks (ongoing). Role: Principal investigator, PI (50.000 euro). **Luca Aldega**
- **Sapienza project 2021 - F**luid circulation and mechanical behavior of the Val d'Agri fault system (Southern Apennines): implication on induced seismicity and groundwater pollution. (ongoing) Role: Researcher (14.800 euro). **Luca Aldega**
- **Sapienza project 2022 -** Fault and fracture network in carbonate reservoir analogues: Scaling laws and controlling factors for the green transition. (ongoing) Role: Researcher (11.000 euro). **Luca Aldega**

- **Stratigrafia delle aree marine costiere come archivi di eventi morfoclimatici e di fenomeni di interferenza antropica"** Resp. Dr. Francesca Budillon, ISMAR, CNR, Napoli. **Sabrina Amodio**
- Studio stratigrafico strutturale della catena del Mesorif (Marocco) **Università di Roma Tre**
- **Tachrift Project.** Leader: Prof. F. Felletti – University of Milan-IT. Geological field surveys on turbidite complexes in NE Morocco; sedimentological logging and facies analysis; physical stratigraphic correlations; GIS data management. **Chiara Zuffetti**
- **Grant for Internationalization 2022 provided by the University of Torino:** "The impact of past climate changes on biodiversity: insight from the late Miocene (Messinian) semi-enclosed Mediterranean basin" (ongoing). Role: PI **Marcello Natalicchio**
- Upper Triassic carbonate platform succession in the Northern Calcareous Alps of Austria and Lombardy Basin and evolution across the Triassic/Jurassic boundary. **Giovanna Della Porta**

Recently published papers

- **Abbassi A.**, **Cipollari P.**, Fellin M.G., Zaghoul M.N., Guillong M., EL Mourabet M., **Cosentino D.** (2022). The Numidian sand event in the Burdigalian foreland basin system of the Rif (Morocco) in a source-to-sink perspective. GSA Bulletin 134, no. 9/10, 2280–2304. https://doi.org/10.1130/B36136.1.
- Aloisi G., Guibourdenche L., **Natalicchio M.**, Caruso A., Haffert L., El Kilany A., **Dela Pierre F.** (2022). The geochemical riddle of “low-salinity gypsum” deposits. Geochim. Cosmochim. Acta 327, 247–275.
- Arcuri N., Muto F., **Chiarella D.**, **Critelli S.** (2022). The Miocene deposits of the Cirò Basin in the evolution of the peri-Ionian region, eastern Calabria. Rend. Online Soc. Geol. It., 59 [https://doi.org/10.3301/ROL.2023.??.].
- Baskin R. L., **Della Porta G.**, & Wright V. P. (2022). Characteristics and controls on the distribution of sublittoral microbial bioherms in Great Salt Lake, Utah: Implications for understanding microbialite development. The Depositional Record, 8(1), 39-66
- **Borrelli M.**, Perri E., Morsilli M., **Critelli, S.** (2022). Late Permian-Triassic sedimentary evolution of the Southern Adriatic area based on wells and cores analysis. Marine and Petroleum Geology 150(106154) [doi.org/10.1016/j.marpetgeo.2023.106154].
- **Borrelli M.**, Perri E., Avagliano D., Coraggio F., **Critelli S.** (2022). Paleogeographic and sedimentary evolution of North Calabrian basins during the Messinian Salinity Crisis (South Italy). Marine and Petroleum Geology, v. 141, Article number 105726.
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