INTERNATIONAL UNION FOR QUATERNARY RESEARCH
WWW.INQUA.ORG

WWW.INQUAROMA2023.it

INQUAROMA2023

@INQUAROMA2023

INQUA2023@uniroma1.it

Invitation to Rome for the XXI INQUA Congress

a Mediterranean perspective on Quaternary Sciences

Rome, 13-20 July 2023

Associazione Italiana per lo Studio del Quaternario
AIQUA

Consiglio Nazionale delle Ricerche

SAPIENZA
UNIVERSITÀ DI ROMA

INQUA
Founded 1928

Invitation to Rome for the XXI INQUA Congress

a Mediterranean perspective on Quaternary Sciences

Rome, 13-20 July 2023
Sapienza University of Rome

Supplementary material will be distributed to the national delegates and INQUA officials; it is available on request from the organising committee and includes: 1) detailed business plan, 2) letters from the Mayor of Rome and Presidents of main Research Institutes and scientific associations, 3) letter from main Mediterranean Institutions;

The information contained in this invitation is based on present-day prices and availability of structures. It will be possible that some activity may change in the next 4 years, especially those concerning the availability of archaeological sites, such as Villa Adriana for the social dinner or the possibility of private visit to the Sistine Chapel and to archaeological excavations not open to the public.

Beside the organising committee, this booklet has been realised with the help of Paola Chiocci Siliotti, Roberto Di Iulio, Giovanni Monegato, Marco Pisapia, Marco Pistolesi, Maurizio Salvati, Mary Anne Tafuri, Ilaria Mazzini. Images credits: Creative Commons, Google maps, Sapienza University of Rome.
Printed in April 2019 by ISPRA.

Dear participants to the XX INQUA Congress
Sapienza University of Rome invites you to run the XXI Congress in the University main campus in summer 2023.
Sapienza is among the oldest European Universities and the largest one, with more than 100,000 students, it is one of the top Italian universities, ranks competitively amongst the best universities around the world and excels in the rankings of many individual subjects, including Natural Sciences. In its 700 years of history, Sapienza constantly played a significant role in Italian history and has been directly involved in key changes and developments in society, economics and science. Sapienza always promoted cultural events, with a special focus on congresses and meetings.
We would be very proud to host the most important meeting on Quaternary Research that, among all the fields of the Earth Sciences, is undoubtfully among the most relevant for society, being paralleled only by energy- or resource-related research.
Only your geological perspective may be able to discriminate between trends and cycles, to frame the high-tech environmental observation within the proper time scale, to understand the relationship between the different factors controlling the environmental changes we are experiencing.
I warmly invite you to our campus and I hope to see you here in 2023.

Prof Eugenio Gaudio
Dean of Sapienza University of Rome

Dear delegates and participants to the XX Congress of INQUA,
it gives me a great pleasure to invite you to Rome for the XXI Congress of INQUA.
AIQUA, which is the reference organization for INQUA in Italy, will be glad to join you for a global view of the Quaternary world starting from "a Mediterranean perspective".
Italy is a small country but it preserves a large spectrum of climate and environmental archives and extraordinary fossil records, essential for the advancement of the different Quaternary issues.
Its peculiar geographical location, morphology and geological history make it an extraordinary laboratory where to discover the complexity and richness of numerous phenomena and events since the start of Quaternary at 2.58 million years. The past and current environmental challenges including the projections towards future changes, as well as the cross-relations between geohazards, active geodynamic processes, and Late Quaternary climatic variations will be analyzed and discussed from a privileged position. Italy, indeed, is located in the central Mediterranean at the bioclimatic and cultural crossroad between Africa, Asia and Europe. AIQUA, together with the Organising Committee, is proud to bring you a great synergy of expertises from international scientists from the Mediterranean area. They represent different countries, some of which are not yet effective INQUA members, and will hopefully soon join in!
In this spirit, we will be guests of the Irish colleagues the next July at Dublin and we hope to see you all in Rome in 2023.

Thank you for considering our bid!

Giovanni Monegato
AIQUA President

1. PROPOSAL

On behalf of the Italian Bid Committee, it is my pleasure to propose the University of Rome main campus as the venue for the XXI INQUA Congress, from 13 to 20 July, 2023.
We want to resume the pioneeristic spirit of the 4th INQUA Congress, held in Rome and Pisa in 1953. The venue will be the Sapienza University to fully exploit the extraordinary advances in the study of the Quaternary in these decades from the scientific and technological point of view,
Moreover, in 2023 we will celebrate with special events the 720th year from the foundation of Sapienza and the 150th anniversary of the Italian Geological Service.
Sapienza University of Rome is an ancient (700 years) Institution and the largest in Europe; the main campus (Città Universitaria) is an architectural masterpiece of the rationalist style. It is located in central Rome, a few hundreds metres from main railway station where shuttle trains and buses from international airports arrive. Countless hotels and tourist facilities are present nearby, as well as along the subway lines, at walking distance from the campus.
Within the wall encircling the main campus we have 25 seminar rooms with 100-400 seats available for the congress, plus open spaces to relax and have informal discussions, bars, a post office, a bank, a police station and a kindergarten. Many smaller seminar rooms will be available for group meetings. The feasibility of such a large congress in a University campus is guaranteed by the success of a 3900 delegates congress on Operational Research held in 2013. The XXI INQUA may represent a similar gathering of scientists.
The availability of the University campus will enable us to have a particularly small registration fee, which will be half of Nagoya and 30% smaller than Dublin, and to hypothesise a robust programme to waive registration fee for ESR (Early Stage Researcher) from developing countries of the Mediterranean area and elsewhere. The theme of the congress is "a Mediterranean perspective on Quaternary Sciences" and we strongly believe that the Mediterranean region, so geologically young and active, is the ideal place where to discuss the process and events that shaped the landscape, the environment and the ecosystems in the last 2.58 million years.
From the glacial systems in the Alps to the desert facing the southern shore, from the large coastal plains and deltas to the rocky coasts where the mountain ranges reach the sea, from the karst to the lacustrine to the volcanic environments, almost all the Quaternary features are present in the region. It is therefore an ideal place to run fieldtrips and host the XXI INQUA Congress.
After early humans in Durban, the view from the Alps in Bern, and geohazard in Nagoya, in Rome we will have the opportunity to deepen all these subjects together and to discuss their mutual interactions at a Quaternary scale. For instance: did the climatic/eustatic changes in palaeogeography and palaeoenvironment influence the early humans dispersal and the Neolithic revolution from east to west or from south to north? How did changes in tectonic activity, climate and eustasy (and in some cases massive volcanic inputs) interact in determining the stratal architecture of high-order depositional sequences? Are the long-lasting historical archives the clue to fill the gap between the instrumental data and the geological record in defining climate, seismic, volcanic cyclicality and/or evolution?
These are just examples that could be dealt with in fieldtrips and scientific sessions in Rome/Italy/Mediterranean region in 2023.
The bid has been prepared enthusiastically by the whole body of Italian Quaternary scientists, a well established scientific community that follow the many scholars that, since about the late 19th century, have focused on Italian Quaternary deposits and stratigraphic sections.
The bid is presented by Sapienza University, the National Research Council and the Italian Association for Quaternary Research. It is supported by the main scientific societies and governmental institutions dealing with Quaternary themes. Last but more importantly, many countries from all around the Mediterranean and the Alps strongly support the bid, by offering fieldtrips and contributing to the scientific programme organisation.

Francesco L. Chiocci
Coordinator of the Italian Bid Committee

2. SUMMARY OF THE PROPOSAL

- Dates: July 13th, 2023 (Thursday) to July 20th, 2023 (Thursday).
- Main host organizations: Sapienza University of Rome, National Research Council (CNR).
- Main theme: a Mediterranean perspective on Quaternary Sciences.
- Venue (page 13): Sapienza University main campus (Città Universitaria), Piazzale Aldo Moro 5, Roma.
- Accommodation (page 21): more than 500 hotels within 1000 meters from the University, countless accommodation in town and along the subway lines; prices ranges from very cheap B&B (40-60€) to luxury hotel (several hundreds €).
- Registration fees (page 23): early 400€, regular 520€, late 680€, student early 160€, student regular 200€, student late 270€, one day 300€.
- Registration fee includes abstract and programme books, conference bag, six lunches and coffee breaks, free entrance to 20 Sapienza museums. A free icebreaker will be organised in the Botanic Garden in the picturesque Trastevere area. Not included in the registration fee: congress dinner (80€) in archaeological site and "night@sapienza" (30€), informal fingerfood dinner, open-air concert and fun in the Campus.
- Grant program (page 24): 100 early stage researchers from economically developing countries will have waived registration fee. A programme to support travel and living expenses of such ESR will be planned, pending the situation in a 4-years time period.
- Field trips (page 37): 37 pre- and post-congress field trips in Italy and in Mediterranean countries; 13 mid-congress one-day field trips.

3. THE THEME OF THE XXI INQUA CONGRESS

The XXI Congress will focus on "a Mediterranean perspective on Quaternary Sciences", to highlight the extreme relevance that Quaternary disciplines have in geologically-active and environmentally-critical regions.The Mediterranean, from the Latin Medius Terraneus, etymologically means in between the land, and it is in fact a region squeezed between the colliding African and European plates. This geodynamic setting drove an extremely fast morphological evolution that, during the last 2.58 million years, interacted with the environmental and geographical changes due to climatic and eustatic cycles. Such natural processes of landscape and environmental dynamics at Quaternary scale, then become geohazards at human scale as they threaten society with volcanic eruptions, earthquakes, tsunamis, landslides, aridification and coastline retreat. The Mediterranean bridges diverse ecosystems, spanning from subtropical desert to temperate woodland, high-altitude tundra and glaciers. It's a place of dramatic transition, where the changes through time superimpose and interact with significant transition in space (Africa to Europe, eastern Atlantic to western Asia), creating a variety of landscape and deposits. In particular, Mediterranean Cryosphere represent one of the most important climate and environmental monitor of the past and present climatic changes and is strongly impacted by human activities. The rich Quaternary fossil record provide clues for inferring factors that might have caused and controlled dispersals, diffusion and settlement of human populations along its coast, whose position was deeply changing because of glacio-eustasy.The geological diversity is paralleled by marked economical and societal diversity. But all of us share similar problems that pose severe challenges to the future, such as an intense land use (and abuse) that often conflicts with natural processes of landscape change. Science, and Quaternary Science above all, is surely a fruitful field where the exchange of experience and knowledge between the shores of a sea (of any sea) will promote a better management of natural resources and hazards, as well as a wide integration of the scientific communities studying them.

4. SCIENTIFIC TOPICS

The scientific programme will be defined in collaboration with INQUA commissions. Among the different Quaternary issues, a focus will be placed on "a Mediterranean perspective", which encompasses almost all the fields of Quaternary Sciences. Hereafter a list of proposed topics, to be expanded and detailed on over 100 scientific sessions, which will make up the programme of the XXI INQUA Congress.

1. From Natural Processes to Geohazards
- Earthquakes, palaeo-earthquakes and seismic hazard
- Active volcanoes
- Tsunami and marine geohazard
- Active tectonics as multi-scalar driving processes
- Short to long-term environmental changes (flooding, landslides, desertification, tectonics), and societal response

2. Landforms, facies architecture and sequence stratigraphy
- Geomorphic processes and sedimentary record
- Glacial and periglacial geomorphology
- Wetlands and paralic environments
- Coastline changes under the effects of climate and geological processes
- Geomorphology and stratal architecture of continental margins

3. Homo and Quaternary environments

Human evolution: fossil record, phylo geny, palaeobiology, palaeoecology and cultural models
- Geological and climate forcing on ancient societies and feedbacks
- Geoarchaeology: from landscape to site and back
- Preserving and disseminating the cultural heritage

4. Ecosystems and biogeography from latest Pliocene to "Anthropocene"
- Response of biota to palaeoenvironmental changes
- Islands, continental bridges and drowned landscapes
- Palaeoecology as a tool for ecosystem management
- Human.environment in the (paleo-) Anthropocene

5. Climate record, processes and models
- Climate proxies
- Palaeogeographic, paleoclimatic, paleoceanographic and paleoecological changes in marine and terrestrial systems
- Past global climate records in polar and mountain ice
- Reconstruct past abrupt and extreme climate changes
- Climate changes on sub-millennial to Milankovitch time scale
- Climate modelling and data assimilation: simulate past changes and future scenarios

6. The Quaternary time machine
- Marine and terrestrial stratigraphy. Advances in correlation
- GSSPs and stratotypes
- Geochronology. Progress in dating techniques

INQUA COMMISSIONS
(reference to commission is indicative)

TERPRO Terrestrial Processes, Deposits and History

CMP Coastal and Marine Processes

PALCOMM Palaeoclimate

SACCOM Stratigraphy and Chronology

HABCOM Humans and Biosphere

5. OUTLINE OF THE PROPOSED PROGRAMME

The congress will be organized in plenary and topical sessions.

Plenary sessions will host lectures by outstanding scientists invited by the congress organization in accordance with INQUA Executive Committee. The talks will be focused on wide and comprehensive topics that are linked to the main congress themes, as well as state-of-the-art and future developments in Quaternary Sciences.

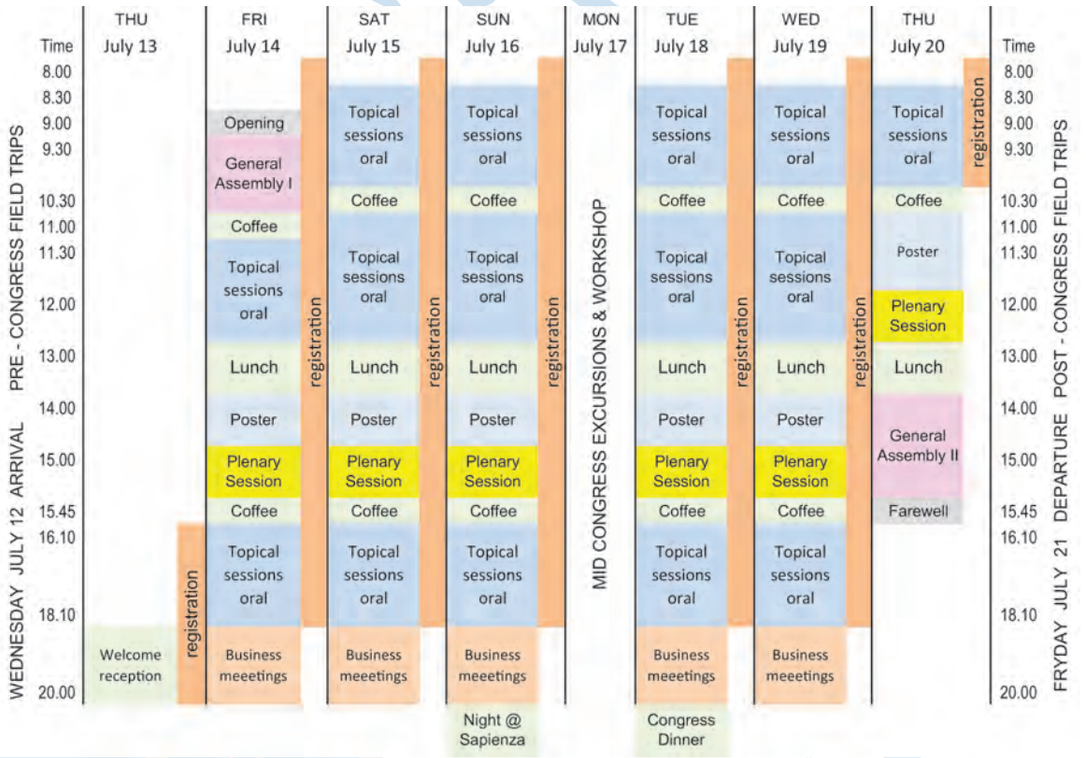
Topical sessions will derive from bottom-up call for sessions to the global Quaternary community, as well as from input by INQUA Commissions and the congress scientific boards. Topical sessions will include oral and poster presentations. Each oral communication will be 15' (including questions), but session conveners may propose to fuse two orals in a 30' one, in case of solicited key papers. Thanks to the availability of 25 seminar rooms with over 100 seats or more, there will be the possibility of running several parallel sessions, allowing up to 3000 oral presentations.

Posters are regarded as a strategic medium for scientific communication. Conveners will be stimulated to organize poster tours in the dedicated time slot for each session, with the principal author briefly presenting her/his poster on the stand. Conveners will also select five most outstanding posters, which will be granted 3' for highlights among the oral papers.

The six plenary sessions will be held in the Aula Magna (1000 seats), which is connected through video conference with two nearby halls with 300 seats each, and several other halls with 250 seats. Web streaming will also be available in the whole campus. As already experienced in recent international congresses at Sapienza University, this facility will guarantee high-quality and comfortable conditions for participants.

On Monday, July 17th participants will be free to join mid-congress excursions and workshops. The arrival of pre-congress field trips will be on Thursday, July 13th, while departure for post-congress field trips on Friday, July 21st.

The INQUA organization cares about quaternary studies as well as family, thus it would be proud to give support to all the participants and their little kids providing a babysitting service for all the duration of the congress.



6. PROVISIONAL ORGANIZATION

Chairperson Francesco Latino Chiocci – Sapienza University of Rome – CNR-IGAG
Honorary Chairperson Maria Rita Palombo – Sapienza University of Rome
Carlo Baroni - University of Pisa
Giuseppe Orombelli – University of Milano Bicocca
Vice Chairperson Laura Sadori - Sapienza University of Rome
Fabrizio Lirer – CNR-ISMAR
Secretary General Ilaria Mazzini - CNR-IGAG

Science programme Committee
Giovanni Monegato (chair) – AIQUA President
Fabrizio Antonioli – ENEA (Rome)
Valter Maggi - University of Milano Bicocca
Adele Bertini - University of Florence
Alessandro Michetti - University of Insubria
Alessandro Amorosi - University of Bologna
Cesare Ravazzi - CNR-IGAG
Carlo Barbante - University of Venice
Giovanni Zanchetta - University of Pisa
Renata Giulia Lucchi - OGS
Paolo Mozzi - University of Padova
Gianmaria Sannino – ENEA (Rome)

Field Excursion Committee
Andrea Zerboni - University of Milano
Emanuela Falcucci - INGV

Secretary Office
Annalisa Iadanza – CNR

Finance Committee
Vincenzo Pascucci - University of Sassari

Local Organising Committee
Donatella Magri (chair) – Sapienza University of Rome
Marco Anzidei – INGV Rome
Andrea Fiorentino – ISPRA Rome
Luca Guerrieri - ISPRA Rome
Anna Maria Blumetti - ISPRA Rome
Elsa Gliozzi – University of Rome TRE
Patrizia Gioia – Sovrintendenza Capitolina BBCC, Rome
Giorgio Manzi – Sapienza University of Rome
Letizia Di Bella - Sapienza University of Rome
Raffaele Sardella - Sapienza University of Rome
Federico Di Rita - Sapienza University of Rome

Advisory Board
Paolo Ballirano (chair) – Director Dept. of Earth Sciences, Sapienza University of Rome
Fabio Trincardi – Director of Earth and Environment Department of CNR
Stefano Laporta – President of ISPRA
Carlo Doglioni – President of National Institute of Geophysics and Volcanology
Sandro Conticelli – President of Geological Society of Italy
Valerio Agnesi – President of Italian Association of Physical Geography and Geomorphology
Massimo Frezzotti – President of Italian Glaciological Committee
Mimmo Calcaterra – President of Italian Association of Applied and Environmental Geology
Silvio Gualdi - President of Italian Society for Climate Sciences
Angelo Camerlenghi - Head of the Geophysical Division, National Institute of Oceanography and Applied Geophysics
Girolamo Belardi - Director CNR-IGAG
Antonello Provenzale - Director CNR-IGG

International Scientific Programme Committee
To be determined in consultation with INQUA Executive Committee

Mediterranean Scientific Programme Committee
(as representatives of Quaternary national communities, NOT as individual scientists)
Franck Bassinot (chair) – Lab. des Sciences du Climat et de l'Environnement, CEA-CNRS-UVSQ, France
Julie Dabkowski - CNRES, France
Juergen Reitner – Geological Survey of Austria, Wien, Austria
Ljerka Marjanac – Croatian Academy of Sciences and Arts, Zagreb, Croatia
Rivka Amit – Geological Survey of Israel, Jerusalem, Israel
Slobodan Markovic – Department of Geography, University of Novi Sad, Serbia
Miloš Bavec – Geological Survey of Slovenia
Naki Akçar – ETH, Zurich, Switzerland

7. VENUE: SAPIENZA UNIVERSITY OF ROME

Besides its historical interest as an architectural masterpiece, the main campus (Città Universitaria, i.e. University Town) is a very large, wall-encircled complex of faculty buildings, open spaces, lecture halls and facilities such as large libraries, police station, kindergarten, bars, post office, bank, etc.
Because of the Congress being held out of the teaching season, the number of lecture halls and meeting rooms is very large; they are all equipped with slide projectors and wi-fi.

To host a large international congress in University faculties is a challenge, but we are very confident because many congresses, with about 2000 delegates and a structure that closely matches the possible XXI INQUA Congress, have been successfully organised in this venue. Key persons of the organisation of such congresses are involved in the organising committee of the XXI INQUA Congress and we plan to replicate the mode of such successful events.

Registration and poster exhibit will take place in the main University building (Rettorato); lectures will be held in the faculty rooms (see maps at pages 15 and 16).

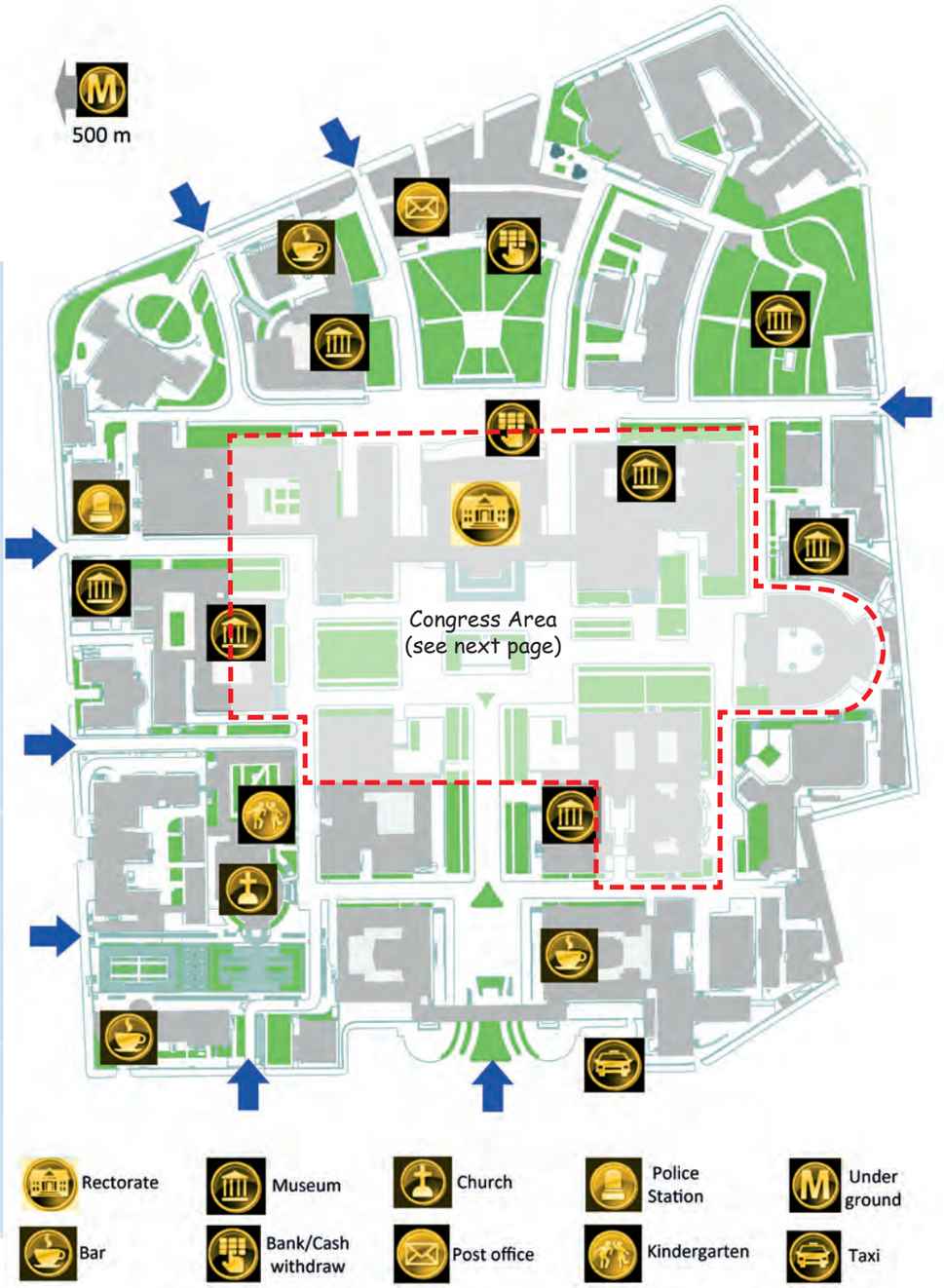
The distance between the different buildings is minimal and different sessions will be located in nearby building according to similar themes so as to minimize transfer from session to session.

Plenary lectures will take place in the "Aula Magna", within the Rettorato, with some 1,000 seats. Real-time video conference will replicate the plenary lecture on several >200 seats lecture halls.

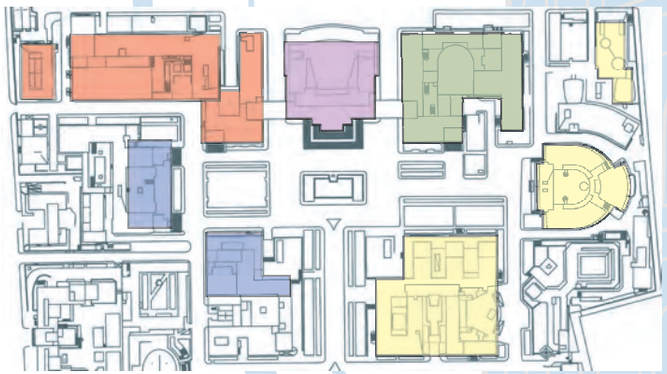
During the whole congress, several extra seminar rooms will be available for meetings of the International Council and other business. Exhibition booths will be located in the Rettorato building.

The amazing open spaces of Città Universitaria campus (all served by wi-fi connection) will be used to relax and for informal discussions as well as for events and evening orchestra concerts. Outer spaces will also be used for lunches and coffee breaks, by using ad hoc structures (see pictures). In the very unlikely event of rain indoor lunches will be organised within the Rettorato.

Participants will be provided with free entrance to the University museums, a system of 20 world-renowned museums which contain a wealth of scientific knowledge (https://www.uniroma1.it/en/pagina/museums).



SEMINAR ROOMS AND SEATS



Rectorate	Aula Magna	ground floor	950
	Room C (computer lab)		25

Dept Physics	Room Cabibbo	ground floor	300
	Room 7		100
Dept Earth Sciences	Room 1	ground	100
	Room 11	first floor	165

Fac. Arts and Humanities	Room I	ground floor	250
	Room II		100
	Room IV		100
	Room V		100
	Room VI		100
	Room A. Venturi		100
	Room XXII		120
Museum of Classical Art	Odeion	ground floor	250
	Partenone		100

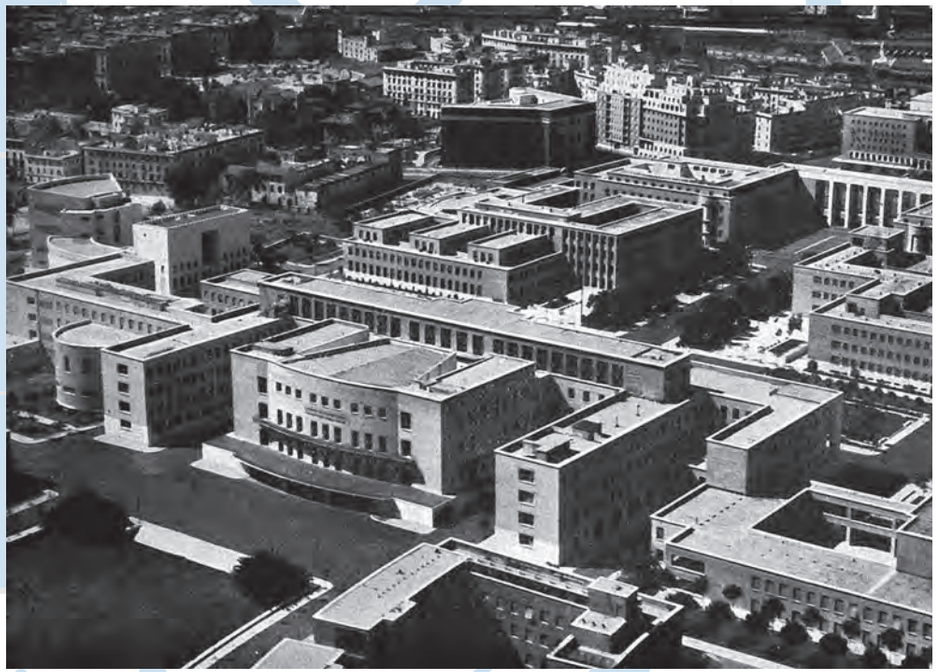
Dept Mathematics	Room 1	ground floor	150
	Room 2		150
	Room 4	second floor	150
	Room 5		150
Dept Chemistry	Room I	ground floor	250
	Room La Ginestra	first floor	410
	Room A		100

Faculty of Law	Room T1	ground floor	300
	Room T2		300
Dept Statistics	Room I	ground floor	159
	Room II		130
	Room 7 (computer lab)		50
	Room XI (computer lab)	first floor	80

8. CITTÀ UNIVERSITARIA: AN ARCHITECTURAL MASTERPIECE

Sapienza University has many campuses in Rome but its main campus is the Città Universitaria (University city), which covers 439,000 m² (4,730,000 sq ft) in downtown Rome and hosts most of the 11 Faculties of Sapienza (www2.uniroma1.it/photogallery).
The main Campus was opened in 1935 and is a masterpiece of Rationalism, designed by architect Marcello Piacentini.
Piacentini was appointed by Mussolini to design the masterplan for what is now known as 'La Sapienza' campus. He designed the main building, but many young Italian architects of the day contributed to the scheme: Arnaldo Foschini (Monumental Entrance), Pietro Aschieri (Faculty of Chemistry), Giuseppe Pagano (Institute of Physics), Giuseppe Capponi (Botany & Pharmacology), Gaetano Rapisardi (Faculty of Law), Gio Ponti (Institute of Mathematics) and Giovanni Michelucci (Mineralogy & Geology).
The masterplan was intended to include "very Roman" buildings in brick and travertine, but the young designers used these materials primarily as cladding on buildings constructed using the latest building technologies and stripped of ornament in a Roman interpretation of international Modernism.
The complex stands in contrast to the EUR district of several years later, as it represents Fascist modernism yet still retains a human sense of scale (www.mimoa.eu).


"Italy between the arts and sciences"
fresco by Mario Sironi, 1935



9. SOCIAL EVENTS

ICEBREAKER. The Orto Botanico is a botanical garden operated by Sapienza University. It covers 12 hectares and hosts some 3000 plant species. The garden is located near Trastevere on the right bank of the Tiber (trans-Tiber), one of the most fascinating and nowadays cosmopolitan districts of Rome. Take the opportunity of a walk there before or after the icebreaker.

Icebreaker at the Botanical Garden in the Trastevere area

SOCIAL DINNER. The Villa Adriana (at Tivoli, near Rome) is an exceptional complex of classical buildings created in the 2nd century A.D. by the Roman emperor Hadrian. It combines the best elements of the architectural heritage of Egypt, Greece and Rome in the form of an 'ideal city'.
Noteworthy for INQUA delegates, it is located in the main travertine area (from where most of the building material of Classical Rome have been quarried).

Open air conference dinner in an archaeological masterpiece… with appetizer in a travertine quarry!

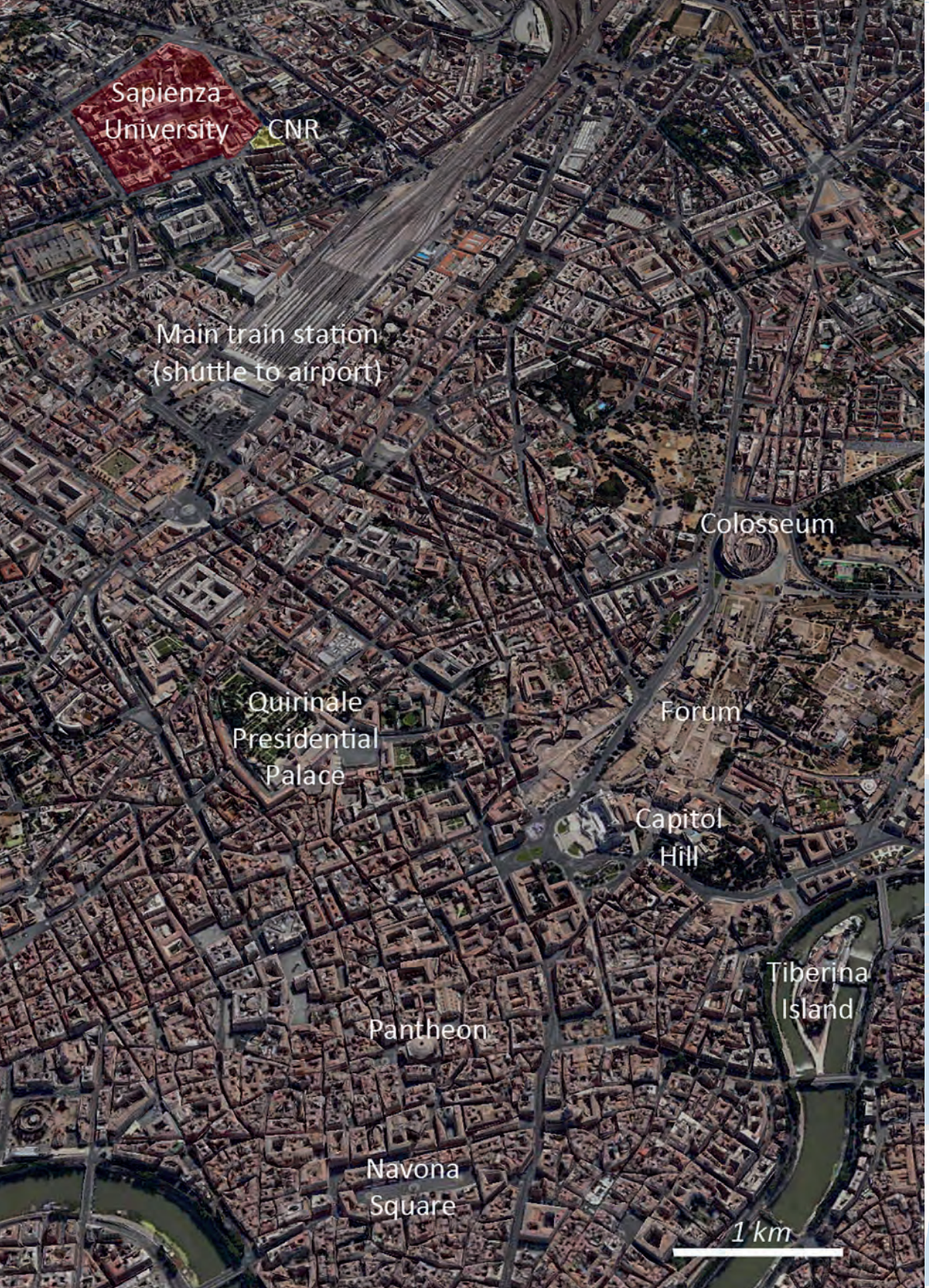
night@sapienza: among flavours and music. Great fun and networking opportunity. A night spent together inside the campus enjoying Mediterranean food and music. The night@Sapienza will be enlivened by MuSa artists who will play jazz and choral music. Musa, an acronym of «Musica Sapienza», is a ten-years old orchestra that plays on official occasions and during public exhibitions, whilst the camera groups keep a regular concert season.

night@sapienza fingerfood and live music

10. ACTIVITIES FOR ACCOMPANYING PERSON

Rome is the largest and most impressive open-air museum in the world. It condenses three millennia of history in its architectural and artistic monuments with masterpieces that make it one of the most visited cities in the world. In a blink you will be seduced by the exciting charm of the capital of the ancient Roman Empire.
The list of monuments and places worth visiting is too long to mention, but you can't miss one of the seven wonders of the modern world: the Colosseum, the largest amphitheatre of the Roman world. The Roman Forum, the religious and political centre of ancient Rome, the Imperial Forums, the Capitoline Hill and the Quirinal are among the best sites to visit.

Take a refreshing tour in the aristocratic Villa Borghese, Trevi Fountain and the Fountain of the Four Rivers, located in the historical centre of Rome. Relax in the amazing squares of Piazza di Spagna and Piazza Navona. Visit the Vatican City, the cradle of Catholic Christianity with St. Peter's Basilica and the Sistine Chapel.
Don't miss a night tour in Trastevere, along the west bank of the Tiber River, with its narrow streets and trendy bars and restaurants where you will taste the famous Italian cuisine, with its selection of tasty wines. The congress icebreaker will take place nearby.
Finally, take an outdoor tour in the nearby Alban Hills, with their historical villages or relax on the sunny beaches of Ostia.



11. TRANSPORTATION, ACCOMMODATION AND VISAS

Fiumicino International Airport (FCO) is the main Italian gateway with direct flights from the most relevant cities all over the world.
From Fiumicino airport to downtown Rome there are bus connections and train shuttle leaving every 30 minutes (duration 35', 15 €). Train shuttle arrives at Termini railway station, one km far from the Congress venue at Sapienza University (see figure). Bus shuttles also connect Ciampino airport (where most of the low-cost flights arrive) to Termini railway station.
Similarly, almost all Italian and European destinations are connected to Rome by trains stopping at Termini. Termini railway station and nearby Sapienza University are conveniently served by an efficient network of bus, subways, and taxis.

The number of hotels in Rome is countless; only in one km range from Sapienza University there are more than 500 accommodation structures, from bed and breakfast to luxury 5 stars hotel; moreover, as Termini and Policlinico subway stations are at walking distance from the University (see figure), any accommodation near to a subway line is convenient for conference delegates.

Health assistance is guaranteed by the University Hospital "Policlinico Umberto I", the main hospital of the city and one of the largest in Europe.
Within the campus there is a police station, a bank with ATM and currency exchange facilities, and a post office.
Upon request the University kindergarten will be asked to organise assistance for children during the conference period.
Disabled access: the train and subway stations are suitable for disabled people.
Within the main campus almost all the main faculty rooms where the congress will be held are barrier-free. Non-professional assistance will be provided by volunteers for disabled people. Professional assistance and care will be considered on request.

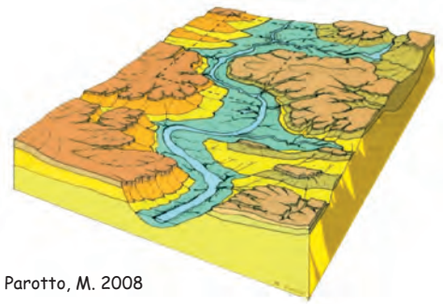
VISA: to find out if you need a visa to enter Italy, please visit www.esteri.it/visti/index_eng.asp. For those conference delegates who will need a visa to enter Italy the local organizer will provide a letter of invitation.

From Termini Station on foot (10-15'):
- Exit the station from via Marsala
- Go straight onto via Marghera
- Turn right onto via Palestro
- Turn left onto viale dell'Università
- Turn right onto viale delle Scienze

Arrive at Sapienza

12. OUTREACH AND SOCIAL IMPLICATIONS

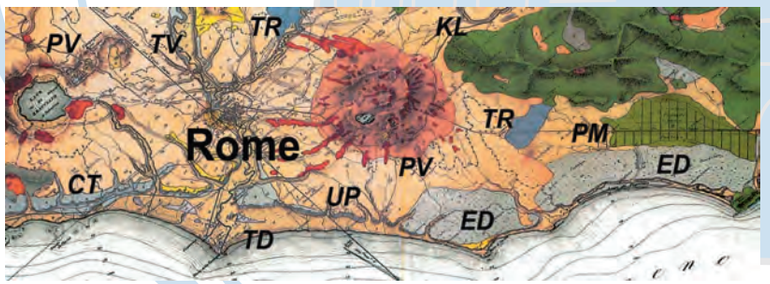
Italian geology is dominated by Quaternary deposits and landforms, but especially the region of Rome shows almost the whole suite of Quaternary features. In the 1878 geological map (bottom of this page and page 23), these are evident and impressive.
The seven hills of Rome are made up of Pleistocene pyroclastic deposits resting upon Pliocene and Lower Pleistocene marine deposit. The Tiber River valley was deeply cut during the last glacial maximum (see figure) and nowadays is filled up with tens of meters of Holocene deposits. On the coast, the Tiber River delta, the largest of the Tyrrhenian Sea, is made up of transgressive and highstand deposits of the last eustatic cycle.



Parotto, M. 2008

The limestone Apennine relieves are deeply karstified and host relevant aquifers, which formed large travertine shields when they meet volcanic hydrothermal systems. Travertine and pyroclastics are therefore the main building materials of roman buildings (from the Roman Empire to the University campus), being the basaltic/trachytic lava flows the source for the typical cobblestone (sanpietrino) of ancient Rome streets. Along the coast north of Rome, the crustal heating due to volcanic activity caused MIS 11, 9 and 5e highstand deposits to rise and form a flight of coastal terraces, whereas south of Rome, eolian deposit dating back to the last glaciation bounds to the sea a wide marshland that was reclaimed only in historical time.
Unfortunately also hazards due occur, to on-going geological processes. Shallow frequent seismicity threatens the Alban Hills volcano near Rome, while the Albano crater lake is a potential hazard site for local population, as outflows and sudden gas release are known since historical times. Flash flood characterise the creeks on the coast north of Rome, sinkholes are occurring frequently, whilst beach erosion is a relevant problem for the highly-exploited seashore on the whole region.
This is the reason why a number of institutions and research institutes carry out research on Quaternary subjects; all of them will be involved in the organisation of the XXI INQUA Congress.
Given the relevance of Quaternary subjects, not only the research community but also the National and local governmental agencies, industries and general public will be interested in the outcome of the INQUA Congress.
Finally, Sapienza University and National Research Council, the main organisers of the event, have very efficient press offices that will ensure a good coverage of the event by the national and local media. A streaming diffusion of the Congress plenary activities will be available.

PM	Pontina marshland
TR	Travertine
PV	Pleistocene volcanoes
TV	Tiber River valley
TD	Tiber River delta
KL	Karstified limestone deposit
CT	Coastal terraces
ED	Pleistocene eolian dune



Detail of G. Ponzi (1878) complete map on page 36

13. ESTIMATED COST AND REGISTRATION FEES

Early Registration	400€
Regular Registration	520€
Late Registration	680€
Student Early Registration	160€
Student Regular Registration	200€
Student Late Registration	270€
One-day Registration	300€

All the sums above are expressed in Euro, which, at the time of the preparation of the bid, is slightly hgher (10%) than US dollar.

Registration fees are reported in the table above.
Registration fee includes abstract and programme books, conference bag, six lunches and coffee breaks, free entrance to 20 Sapienza museums. A free icebreaker will be organised in the Botanical Garden in the picturesque Trastevere area.

Given the availability of University structures we have been able to keep the registration fees small and waive the registration fee for 100 early stage researchers of economically developing countries.

We have a break-even number of participants at 1750 that we use as the worst case scenario even if we foresee we may have many more, considering the 1700 registered at Nagoya and over 2000 expected in Dublin.

Budget details from the bid organising committee are available on request.

These figures are based on present-day situation. Should changes occur, or if INQUA capitation fee will be requested, they will be updated.

Not included in the registration fee: congress dinner (80€) in archaeological site and "night@sapienza" (30€), informal fingerfood dinner, open-air concert and fun in the Campus.

14. GRANT PROGRAM

As organising committee, we would like to have a robust programme to invite PhD students and ECRs (Early Career Researchers) from developing countries wishing to present their work at XXI INQUA.

It will be a good occasion to:
1) involve such community (Rome is probably the easiest and cheapest destination from North Africa and the Middle East),
2) have information on research going on in the fast economically and socially developing southern shore of the Mediterranean, and
3) boost new activities and collaboration on the field of Quaternary Sciences.

We will be waiwing registration fee for 100 participants belonging to the 2 categories, PhD students and ECRs (defined as someone within 8 years of the award of their PhD or equivalent professional training). The waiwing of the registration fee will be competitive and will require that an abstract (first authorship) has been accepted for presentation at the congress.

For this reason we plan to devote to the grant program at least half of the Italian funding. Swiss, French and Austrian institutions are prepared to contribute with variable amounts to such programme, if that is possible for them in 2023.

AIQUA - Associazione Italiana per lo studio del Quaternario - will provide a limited number of attendance support awards. The awards are usually open to non tenured researchers, scholarship holders and research fellows. One award will be reserved to a researcher holding Italian nationality.

AIQUA Italian Association for Quaternary Research

AIQUA - Associazione Italiana per lo Studio del Quaternario (www.aiqua.it) convenes academics and professionals with an interest in the study of the most recent periods of Earth history, the Pleistocene and the Holocene.

Since 1978, the Association gathers scientists from a wide range of disciplines including geology, geomorphology, palaeontology, archaeology, climatology, ecology, engineering, and hydrology.

AIQUA represents the reference Italian organization at INQUA - International Union for Quaternary Research and is also affiliated to EGU - European Geophysical Union.

It promotes Quaternary studies through the organisation of conferences, field meetings, and summer schools. It supports the participation to international congresses of outstanding, early-career researchers through competitive grants.

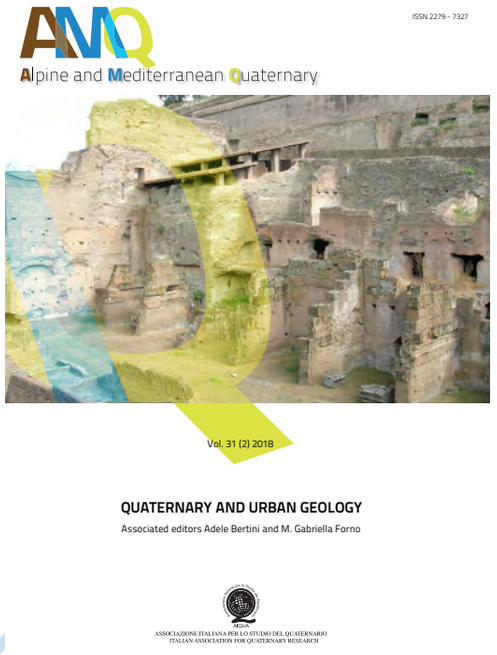
Alpine and Mediterranean Quaternary

(formerly "Il Quaternario - Italian Journal of Quaternary Sciences")

AMQ is the official journal of AIQUA (http://amq.aiqua.it).

AMQ is free of charge. No additional costs are required for color figures and tables.

AMQ publishes peer-reviewed original research and review papers concerning the Quaternary history, past climate, past biodiversity, relative sea level change, past human-environment interactions, impact of ancient civilizations and evolution of the regions surrounding the Mediterranean Basin, including the Alpine-Himalayan mountains and basins, the Middle East and Northern Africa. Original reports dealing with wider geographical perspectives and global processes are also welcome. It also contains comments and replies on previous works, book reviews, news of interest and reports on AIQUA activities. A hard-copy version of the journal is released to AIQUA associates. The journal is issued twice per year.



MOUNTAIN GLACIATIONS

Image credits: Alessandro Fontana

The glacial amphitheatres located on the southern side of the Alps (northern Italy) represent an archive where Quaternary geologists have attempted to assess the chronology and extent of Alpine glaciations since the 19th century. These systems represent the remnants of piedmont lobes flowing from the Alpine chain towards the Po Plain. The evidence points to the prominent spread of mountain glaciers since the late Early Pleistocene (MIS 22-20) to the Last Glacial Maximum.

Their study is a clue for understanding the dynamics of mountain glaciations in temperate areas sensitive to rapid climate changes, thanks to the shape and location of the Alps at the boundary between the Mediterranean Sea and Continental Europe. Recent reconstructions indicate geographical and chronological variations in extent of glaciers, suggesting that the mountain systems reacted differently to the climate change from a cold phase to the subsequent.

Italy: an Encyclopaedia of Quaternary Sciences
HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

PALAEOANTHROPOLOGY

Image credits: Soprintendenza Archeologia della Puglia

Three major evolutionary transitions are documented by the human fossil record from Italy, included between the Middle and the Late Pleistocene. Specimens such as the Ceprano calvaria, the skeleton from Altamura, the Neanderthals from Saccopastore and Monte Circeo, or the various early modern human samples scattered North to South, are the most notable signals of these transitions coming from the Italian peninsula.
Climate change may be regarded as a major driving factor of human evolution and dispersal, as it modulates the availability of resources through severe influence on the environment. The rich documentation from Italy shows interesting relationships between climate, landscape, vegetation, animal communities, humans and their archaeological footprints.
This opens to fantastic perspectives in the interrelated fields of palaeoanthropology and geosciences, and to a better understanding on human evolution as well as on the role of humans in Quaternary ecosystems.

Italy: an Encyclopaedia of Quaternary Sciences
HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

PALAEOSEISMOLOGY

Image credits: Christoph Grützner

Recent major progress in Quaternary Geology and Tectonics studies in Italy are deeply related with the extraordinary development of palaeoseismological and archaeoseismological analyses in the past 20 years. Italian seismic landscapes are beautifully exposed and assorted: capable faulting and thrusts, for instance in the Po Plain Foredeep, hit by the Modena M6.0 event in 2012; rifting and basin-and-range topography in the Apennines, typified by the palaeoseismic setting of the 2009 M6.3 L'Aquila earthquake, but also in Calabria and Eastern Sicily; strike-slip faulting in the Gargano Promontory; volcanic earthquake surface faulting at Mt. Etna; extensive tsunami and palaeotsunami stratigraphic records in the Salento, Messina and Siracusa areas.
Always accompanied by spectacular archaeoseismological evidence, Italy is therefore a natural laboratory for understanding the role played by earthquake effects in the Quaternary evolution of actively deforming regions, also as a major contribution to global seismic risk mitigation strategies.

Italy: an Encyclopaedia of Quaternary Sciences
HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

STRATIGRAPHY and GSSPs

Image credits: Luca Capraro

Italy preserves an amazing Quaternary stratigraphic record of terrestrial and marine sediments, the latter especially significant to define global units of the International Chronostratigraphic Chart and to set global standards for the International Geologic Time Scale (GTS). This is a truly unique opportunity to discover the Italian marine successions that significantly contributed to the development of the modern GTS, among them, namely:
- Monte San Nicola (Sicily), where the Global Boundary Stratotype Section and Point (GSSP) of the Gelasian (Early Pleistocene Subseries) has been ratified (in the figure).
- Vrica (Crotone Basin, Calabria), where the GSSP of the Calabrian (Early Pleistocene Subseries) has been defined.
- Valle di Manche (Crotone Basin, Calabria) and Montalbano Jonico (Southern Apennines Foredeep, Basilicata), both now candidates for hosting the GSSP of the "Ionian" (Middle Pleistocene Subseries).
- Il Fronte (Taranto, Apulia), candidate for the GSSP of the "Tarentian" (Upper Pleistocene Subseries).

Italy: an Encyclopaedia of Quaternary Sciences

HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

CLIMATE ARCHIVES

Image credits: Enrico Capezzuoli

Italy is extremely rich in valuable continental and marine archives, which contribute to reconstruct environmental and climate changes since the dawn of the Quaternary. Long and complex successions of lacustrine to fluviatile and glacial deposits (including peat, varves and trunk annual rings) are preserved in the borderlands of the Alps, and in several intermontane and volcanic basins of the Apennines. Freshwater carbonates, including speleothems, travertines, calcareous tufa and lake marls, are largely present, providing a particularly rich documentation since the last interglacial. The relationships between climate and human civilizations are testified in high altitude records, rock shelters, and by the millennial history of settlements in alluvial and coastal realms. Proximal to distal marine deposits, often including marker horizons such as sapropels, are distributed both on- and offshore. Numerous are also the outcrops documenting transitional sedimentary environments. Such a multiplicity of climate archives allows us to develop land-sea stratigraphic correlations, to discuss the interplay of eustatism and tectonics in driving erosional and depositional processes, to understand long-term changes, including projections on how the Earth might respond to future environmental modifications.

Italy: an Encyclopaedia of Quaternary Sciences

HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

INSULARITY

Islands have been regarded by scientists as a living laboratory of evolution, and a prime target for the study of forces influencing evolution and diversification. In response to the special characteristics of insular environments, plants and animals often undergo evolutionary changes, which can be observed on islands of varying surface area.

During the Quaternary, dramatically specialized vertebrates inhabited a number of Mediterranean islands. These fascinating animals, whose ancestors are often difficult to trace or imagine, are miniaturized elephants and hippopotamuses, deer either as large as a dog or larger than a moose, short-legged bovids with stereoscopic vision, giant turtles and lizards, little owls larger than horned owls, rodents and insectivores that changed their size and life behaviour.

The variety and richness of this fossil record provide fundamental clues to solve the two main issues, attentively scrutinized but still hotly debated: the loss of biodiversity of insular faunas and the peculiar changes undergone by island settlers, above all changes in body size shown by endemic reptiles, birds, and mammals.

GLACIERS AND GLACIOLOGY

Image credits: Valter Maggi

The climatic and environmental history of the Late Holocene and Anthropocene are registered in the Italian Glaciers. Form the Alps to the Apennines, the glaciers represent the first monitor of the past and present climate change. The Little Ice Age represents the maximum glacier advance after the last glacial period, and sometime many glaciers preserve deposits over the whole Holocene, as for the Rutor Glacier that records climatic history of the last 9000 years. The reconstruction of the LIA position by morainic margins and trimlines permits to evaluate the changes in term of surface and volume of the glaciers during the last 2 centuries and provides information for the climate change effected on the Italian cryosphere. Ice core activity on the high mountain glaciers allows to reconstruct climatic and environmental proxy records as temperature, atmospheric chemistry and mineral dust, and provides information on the natural and human impacts from seasonal, as for the Lys Glacier, to millennia scales resolution, as for the Colle Gnifetti. All the cryosphere represents the next challenge to understand the climatic and environmental evolution during the Anthropocene and after.

Italy: an Encyclopaedia of Quaternary Sciences
HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

ACTIVE VOLCANOES

Active volcanoes are the geological landmarks of Central and Southern Italy. They are of paramount importance in volcanology: Vulcano, Stromboli and Vesuvius are the reference-locality of the "Vulcanian", "Strombolian" and "Plinian" type of eruption, repectively. In this region emplaced the Etna volcano, the largest active volcano in Europe, as well as several submarine volcanoes like the Marsili. Volcanic activity has punctuated the recent geological history of Italy, with magmatic provinces having very diverse petrology and chronology, such as Tuscany (14-0.2 Ma), Roma and Umbria (0.6-0.02 Ma), Campania (0.8 Ma to present), Aeolian arc (1 Ma to present), Sicily (7.5 Ma to present), Sardinia (5.3-0.1 Ma), and the Tyrrhenian Sea floor (7 Ma to present).
Explosive events have been producing tephra deposits with specific compositional characteristics, which allow for long-range chronostratigraphic correlations. Recent development in the analysis of Italian tephra, such as total grain-size distribution, indicates that these deposits may represent a primary key for characterizing past and present eruptions and estimating the associated hazard.

MARINE GEOLOGY

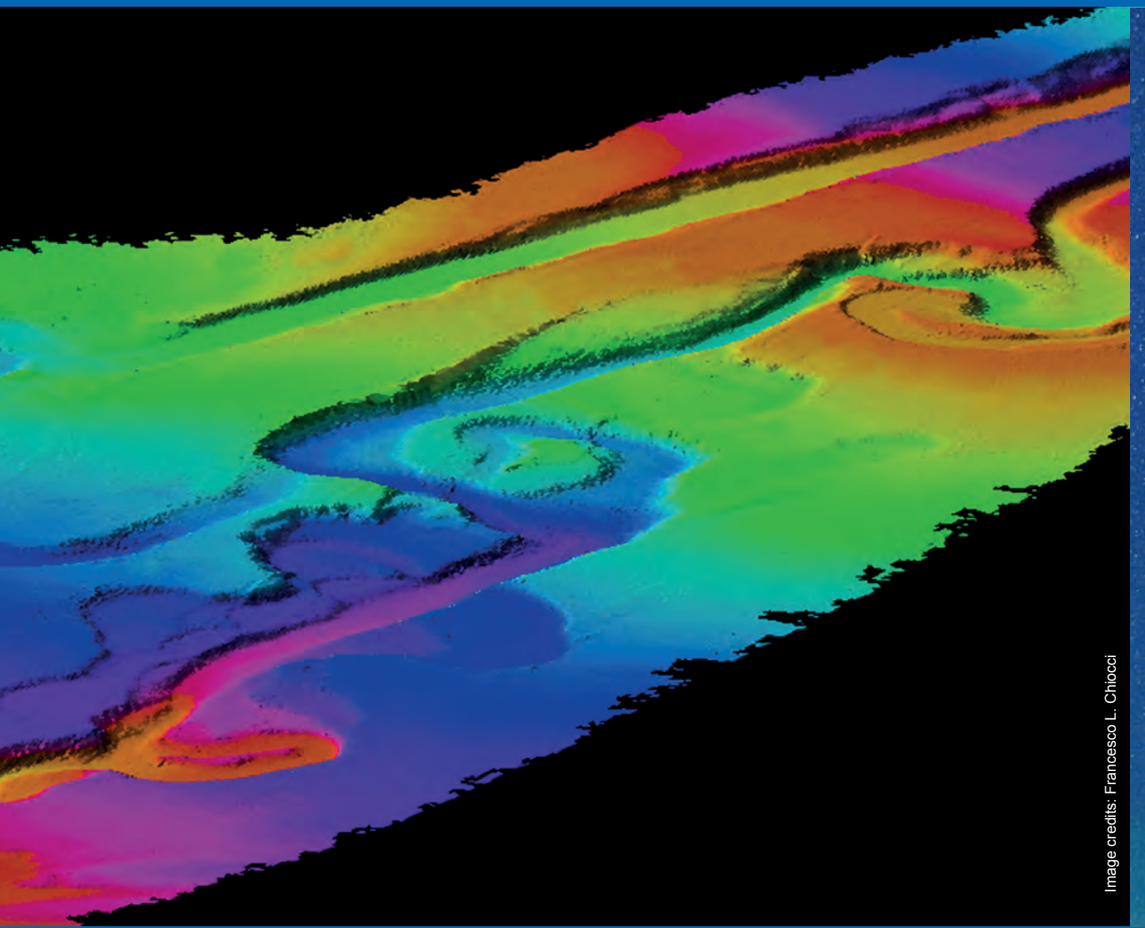


Image credits: Francesco L. Chiocci

Italy is a rather small country with an extremely varied and complex geology also in its continental margins, their stratal architecture and their Quaternary deposits. In the Adriatic Sea, a narrow foredeep constrained between the Apennines and Dynarids, the Po River created lowstands prograding sequences that almost filled-up the whole basin forming a low-gradient shelf that was then quickly transgressed. In the Ionian Sea the accretionary prism present above the subducting Ionian plate is affected by diffuse fluid escape, overthrusting, while the high-sedimentation rate causes the continental slope to be unstable. deeply affected by mass wasting and carved by countless canyons. The Sicily Channel is an intraplate rift with widespread volcanism. In 1831, with a surtseyan eruption, caused the emergence of an island and a French/British/Italian race to colonise it. The Back-arc Tyrrhenian Sea hosts large volcanic seamounts with active hydrothermal activity and extensive canyon systems. Finally, explosive volcanism, strong seismicity with deep-seated hypocentres, and high-relief coasts with frequent flash-flood let the coast be particularly subject to geo-hazards.

Italy: an Encyclopaedia of Quaternary Sciences
HOT TOPICS ON ITALIAN QUATERNARY RESEARCH

RELATIVE SEA-LEVEL CHANGES

Image credits: Fabrizio Antonioli

Italy occupies the central portion of the Mediterranean basin and with its N-S elongation displays a variety of coastal environments. Rsl is the sum of eustatic, isostatic and tectonic settings: the first is lower than global, the latter varies with location.
Sedimentological, geomorphological and biological markers allow the reconstruction of relative sea-level variations since the late Pleistocene. Using submerged speleothems (with hiatus or marine overgrowth) rsl reconstructions push up to 1.5 Ma. Stable areas, like Sardinia, Tuscany and S Latium are key sites for testing geophysical models, while subsiding and uplifting coasts provide means to investigate the post-LGM transgression in different contexts. Ancient villages and docking sites, which settled along the coast since early civilization (today submerged), provide powerful archaeological markers for deciphering sea-level changes.
The present anthropic pressure along the Mediterranean is very intense and many cities and 32 coastal plains are endangered by future sea-level rise; Venice and the Po Delta are among the best examples.

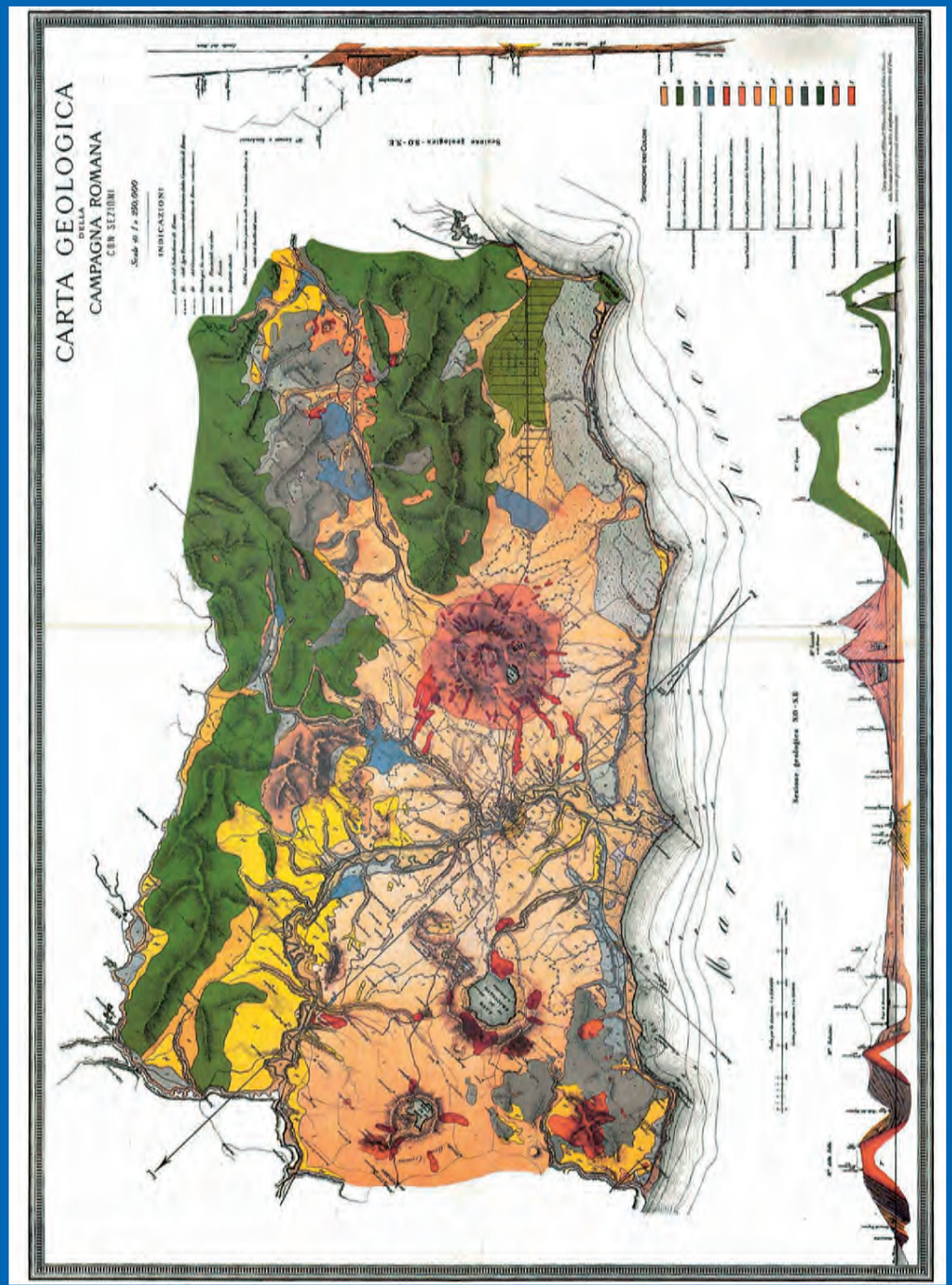


Image credits: G. Ponzi (1878) Carta geologica della Campagna Romana, courtesy of ISPRA

15. Fieldtrips of the XXI INQUA CONGRESS

Details and full description of fieldtrips at

http://www.INQUAROMA2023.it/the-bid/fieldtrips

The proposed list of fieldtrips (18 pre- and 19 post-congress trips and 13 mid-congress one-day trips) exceeds the real number that will actually take place, according to number of delegates we are expecting in Rome. However given the enthusiastic answer we received from Italian, Mediterranean, and circum-Alpine colleagues, we decided to keep all of them in our programme, so as to maintain a rich and diversified offer.

After the deadline for early registration (January 2023) we will select a maximum number of 20 fieldtrips, on the basis of pre-registered ones, which will cover all the fields of Quaternary Sciences.

Because of space restriction in this booklet, the fieldtrips are here only listed with leaders, cost and itinerary.

A description of each fieldtrip is available at

www.INQUAROMA2023.it/the-bid/fieldtrips

INQUA COMMISSIONS
(reference to commission is indicative)

TERPRO Terrestrial Processes, Deposits and History

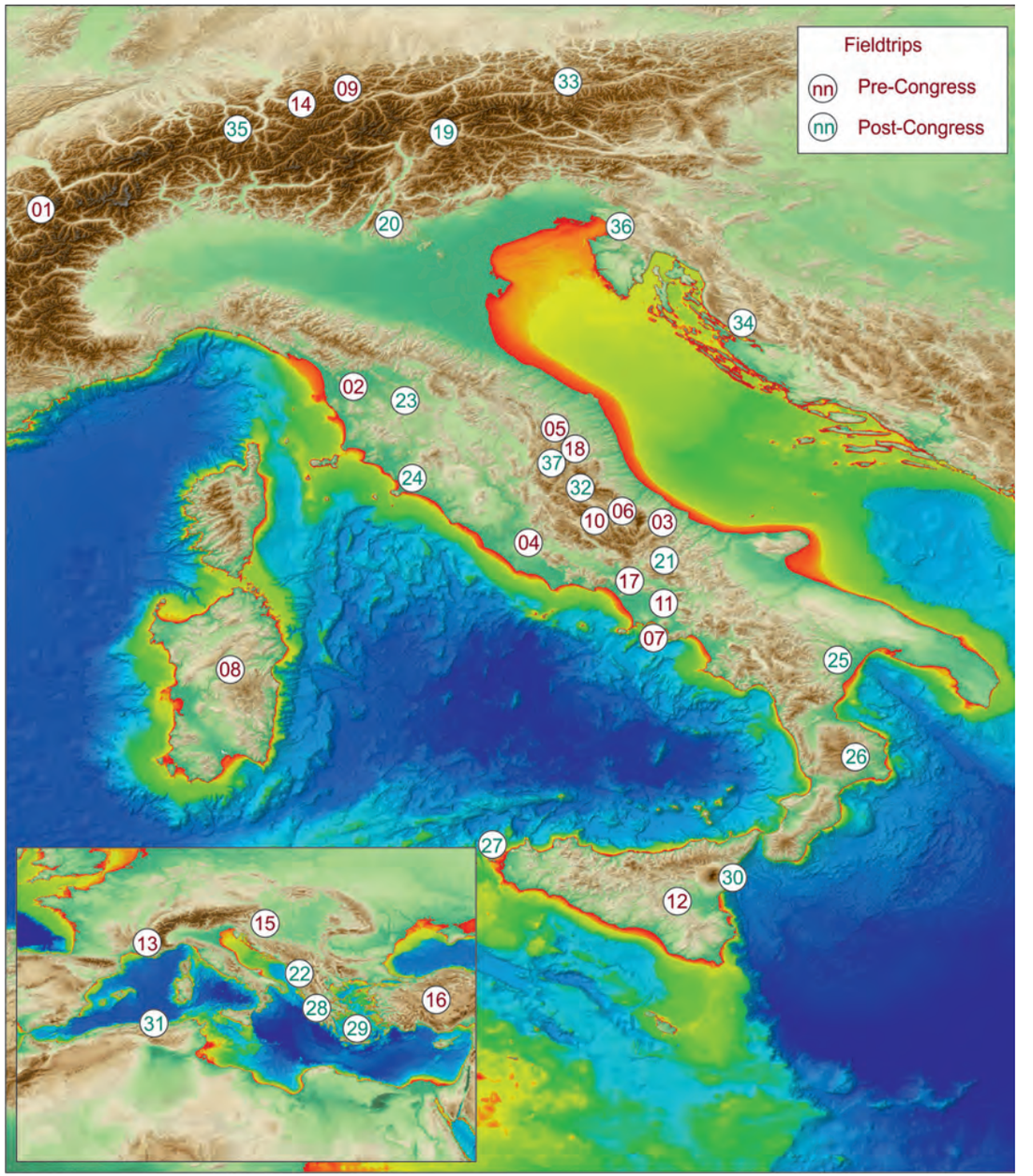
CMP Coastal and Marine Processes

PALCOMM Palaeoclimate

SACCOM Stratigraphy and Chronology

HABCOM Humans and Biosphere

Requires trekking equipment		Cultural heritage	
Physically demanding fieldtrip		Possibility of high temperature	
Spectacular landscape		Naturalistic aspects	



PRE-CONGRESS FIELD TRIPS

01. PRE - Quaternary glacialism of the Aosta Valley: a transect from the Ivrea end moraine system to the Monte Bianco Massif

F. Gianotti (Univ. Turin), M.G. Forno (Univ. Turin)
5 days, 700€, Turin – Courmayer – Turin

02. PRE – Palaeosols across the Northern Apennines: insights into the Late Quaternary dynamics of an active orogen

S. Carnicelli (Univ. Florence), F. Sani (Univ. Florence), E. Costantini (CRA-ABP Florence), et al.
5 days, 650€, Rome – Reggio Emilia – Rome

03. PRE – Quaternary and Prehistoric occupation of Abruzzo (Central Italy)

E. Nicoud (Ecole Française Rome), S. Agostini (Soprint. Beni Archeologici Abruzzo)
3 days, 300€, Rome – Abruzzo – Rome

04. PRE – Deep piping sinkhole in Apennine plain areas, Italy

S. Nisio (Geol. Survey Italy)
3 days, 150€, Rome – Rieti – Latina – Caserta – Siena – Rome

05. PRE – Major controls on architecture of Pleistocene slope, shallow-marine and continental sediments in eastern central Italy

C. Di Celma (Univ. Camerino)
3 days, 250€, Rome – Ascoli Piceno – Pescara – Rome

06. PRE – The Central Apennine intermountain basins: archives of the Quaternary history

G. Zanchetta (Univ. Pisa), B. Giaccio (IGAG CNR), S. Nomade (LSCE, CEA France) et al.
3 days, 400€, Rome – Sulmona – Rome

07. PRE – The active volcanoes of the Neapolitan area: Somma-Vesuvius and Campi Flegrei

G. Mastrolorenzo (INGV-Osservatorio Vesuviano) D.M. Palladino (Sapienza Univ. Rome)
3 days, 350€, Rome – Pozzuoli – Procida – Rome

08. PRE – Sardinia: a Quaternary world

M.R. Palombo (Sapienza Univ. Rome), F. Antonioli (ENEA), R.T. Melis (Univ. Cagliari), P. Orrù (Unv. Cagliari)
6 days, 850€, Rome – Alghero – Cagliari – Olbia – Rome

09. PRE – 10,000 years of human activity in the high alpine area of the Silvretta Massif/ Switzerland-Austria

T. Reitmaier (Arch. Service Grisons), J.N. Haas, (Univ. Innsbruck), F. Anselmetti (Univ. Berne)
3-4 days, 500€, Zurich – Chur – Engadine – Zurich

10. PRE – Palaeoseismology and seismic landscapes in Italy

A.M. Michetti (Univ. Insubria), D. Pantosti (INGV), L. Guerrieri (ISPRA), A.M. Blumetti (ISPRA)
5 days, 700€, Rome – Colfiorito – L'Aquila – Fucino – Rome

11. PRE – Volcanoes, environment and human settlements from the Bronze Age to the XVI Century in the area of Naples (Italy)

S. de Vita (INGV-OV), M.D. Di Vito (INGV-OV), P.M. Guarino (ISPRA)
3 days, 450€, Rome – Naples – Rome

12. PRE – The Pliocene to Lower Pleistocene stratigraphic record of Southern Sicily

L. Capraro (Univ. Padova), E. Di Stefano (Univ. Palermo)
3 days, 450€, Rome – Gela – Rome

13. PRE – Late Quaternary landscapes and palaeoenvironments through the Mediterranean and the Alps

V. Ollivier (Univ. Aix-Marseille, CNRS), F. Magnin (Univ. Aix-Marseille, CNRS), A. Ali (Univ. Montpellier 2 CNRS)
3 days, 250€, Aix en Provence – Luberon – Southern Alps – Western Alps – Aix en Provence

14. PRE – Huge Alpine landslides, massive mass movements from detachment to deposit, E Switzerland, W Austria

M. Ostermann (Univ. Innsbruck), C. Prager (Alps Hazard Asses. Innsbruck)
3 days, 400€, Zurich – Chur – Innsbruck – Zurich

15. PRE – Life with geohazard at the contact between the Alps and the Mediterranean

P.J. Rupnik (Geolog. Survey Slovenia), J. Reitner
(Geolog. Bundesanstalt Austria), T. Marjanac (Faculty of Science, Uni. Zagreb)
4 days, 600€, Rome – Trieste – Istria – Ljubljana – Rome

16. PRE – Late Pleistocene-Holocene uplift and active tectonics at the southern margin of the Central Anatolian Plateau and Cyprus Island (southern Turkey)

D. Cosentino (Univ. Roma Tre), C. Yildirim (Istanbul Technical Univ.), E. Gliozzi, (Univ. Roma Tre)
6 days, 900€, Rome – Silifke – Cyprus – Rome

17. PRE – Vesuvio and Roccamonfina: humans and volcanoes

M. Di Vito (INGV), M. Palombo (IGAG-CNR), A. Panarello (Univ. Cassino). I. Bidditu (IsIPU), A. Tomeo (Sopr. CE), G. Farinaro, P. Mietto (Univ. Padova)
2 days, 300€, Rome – Roccamonfina – Vesuvius – Rome

18. PRE – The 2016-2017 Central Italy seismic sequence: new perspectives in Italian seismotectonics

E. Falcucci (INGV), S. Gori (INGV), A.M. Michetti (Univ. Insubria), A.M. Blumetti (Ispra), E. Vittori (Ispra), V. Comerci (Ispra), A. Pizzi (Univ. Chieti), P. Boncio (Univ. Chieti), M. Moro (INGV), R. Civico (INGV), M. Saroli (Univ Cassino), G. Fubelli (Univ. Torino), L. Guerrieri (Ispra), P. Di Manna (Ispra)
3 days, 300€, Rome – Castelluccio di Norcia – Amatrice – Rome

POST-CONGRESS FIELD TRIPS

19. POST – Large landslides, climate changes and human impact in the Italian Dolomites since the Lateglacial

M. Soldati (Univ. Modena and Reggio Emilia), A. Pasuto (CNR-IRPI), S. Ivy-Ochs (ETH-Zurich), S. Martin (University of Padova)
4 days, 600€, Venice – Cortina d'Ampezzo – Molveno - Venice

20. POST – The glacial–fluvioglacial systems of the eastern Southern Alps: a key-area for the chronology of the Alpine Last Glacial Maximum

G. Monegato (CNR-IGG), P. Mozzi (Univ. Padova), A. Fontana (Univ. Padova)
4 days, 400€, Verona – Udine – Venice

21. POST – Palaeoecology, Paleolithic and human fossil record in south-central Italy

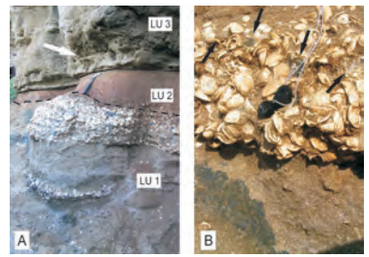
G. Manzi (Sapienza Univ. Rome), C. Peretto (Univ. Ferrara)
4/5 days, 580/750€, Rome – Ceprano – Matera – Venosa – Altamura – Apricena – Isernia – Rome

22. POST – Holocene evolution of Lake Skhodra (Albania): natural versus human impact

E. Gliozzi (Univ. Roma Tre), I. Mazzini (IGAG-CNR), R. Koci (Polytechnic Univ. Tirana), S. Bushati (Albanian Sciences Academy)
3 days, 350€, Rome – Skadar – Rome

23. POST – When tectonics and climate take over: Quaternary depositional history of extensional Tuscan basins

A. Bertini (Univ. Florence), A. Brogi (Univ. Bari), E. Capezzuoli (Univ. Perugia)
3 days, 380€, Rome – Florence – Siena – Rome



24. POST – Late quaternary coastal systems of central Tuscany: record of sea-level changes and tectonics

G. Sarti (Univ. Pisa), G. Molli (Univ. Pisa)
3 days, 350€, La Spezia – Pisa - Livorno - Grosseto

25. POST – The Bradanic Trough: subsidence, shortening and uplift of the Quaternary south-Apennines foreland-basin

M. Tropeano (Univ. Bari), L. Sabato (Univ. Bari), S. Longhitano (Univ. Basilicata)
5 days, 600€, Rome – Matera – Rome

26. POST – Reference sections for the definition of GSSPs of Pleistocene Stages (Southern Italy)

L. Capraro (Univ. Padova), M. Marino (Univ. Bari), A. Negri (Politec. Univ. Marche)
4 days, 600€, Rome – Bari – Rome

27. POST – Egadi islands: five days in prehistory

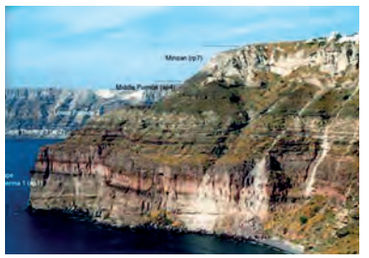
F. Antonioli (ENEA), M.R. Palombo (Sapienza Univ. Rome), V. Lo Presti (Sapienza Univ. Rome)
5 days, 600€, Rome – Trapani – Egadi Islands – Rome

28. POST – Active tectonics, earthquake geology, paleoenvironment and Quaternary sequences: a transverse along the Corinth Gulf Rift to Zakynthos island

I. Papanikolaou (Agricult. Univ. Athens), M. Triantaphyllou (Nation. Kapodistrian Univ. Athens), E. Lekkas (Nation. Kapodistrian Univ. Athens)
5 days, 450€, Athens–Corinth–Zakyntos–Athens

29. POST – Santorini island (Greece): four days in a volcano

P. Nomikou (Univ. Athens), T. Druitt (Univ. Blaise Pascal), D. Papanikolaou (Univ. Athens)
4 days, 700€, Athens – Santorini – Nea – Palea Kameni – Athens



30. POST – Lava-flows stratigraphy and tephrostratigraphy reveal Etna's eruptions' history in the Holocene

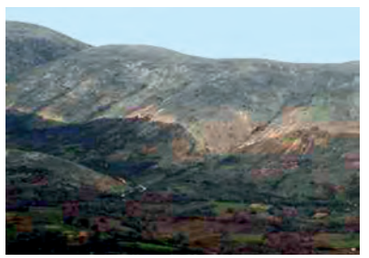
M. Coltelli (INGV Osservatorio Etneo, Catania)
4 days, 450€, Rome – Catania – Rome

31. POST – Active coastal thrusting and folding, evidence of tsunami deposits, and archeoseismicity (Northern Algeria)

S. Maouche (CRAAG. Algiers), S. Ferdi (CNRA, Algiers), F. Doumaz (INGV Roma)
4 days, 300€, Rome – Algiers – Rome

32. POST – Quaternary geology and neotectonics in the 2009 L'Aquila earthquake region, central Italy

E. Falcucci (INGV), S. Gori (INGV), G. Monegato (CNR-IGG), G. Scardia (Univ. Sao Paulo, Brasil)
2 days, 220€, Rome – L'Aquila – Rome

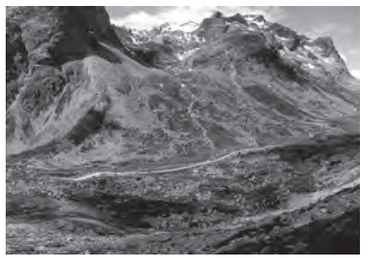


33. POST – Glaciers and mass movements from the LGM until today in the Austrian Eastern Alps

M.G. Bichler (Geol. Survey Austria), J.M. Reitner (Geol. Survey Austria)
5 days, 800€, Rome – Salzburg – Tyrol – Rome

34. POST – Pleistocene glacial history of Dinaric Alps (coastal mountains and islands in Croatia)

Lj. Marjanac (Cro. Acad. Sci. Arts) and T. Marjanac (Faculty of Science, Uni. Zagreb)
6 days, 900€, Rome – Rijeka – Zadar – Rome



35. POST – Lateglacial to Little Ice Age glacier variations in the Swiss Eastern Alps

M. Maisch (Univ. Zurich), S. Ivy-Ochs (ETH)
3 days, 400€, Zurich – Chur – Engadine – Zurich

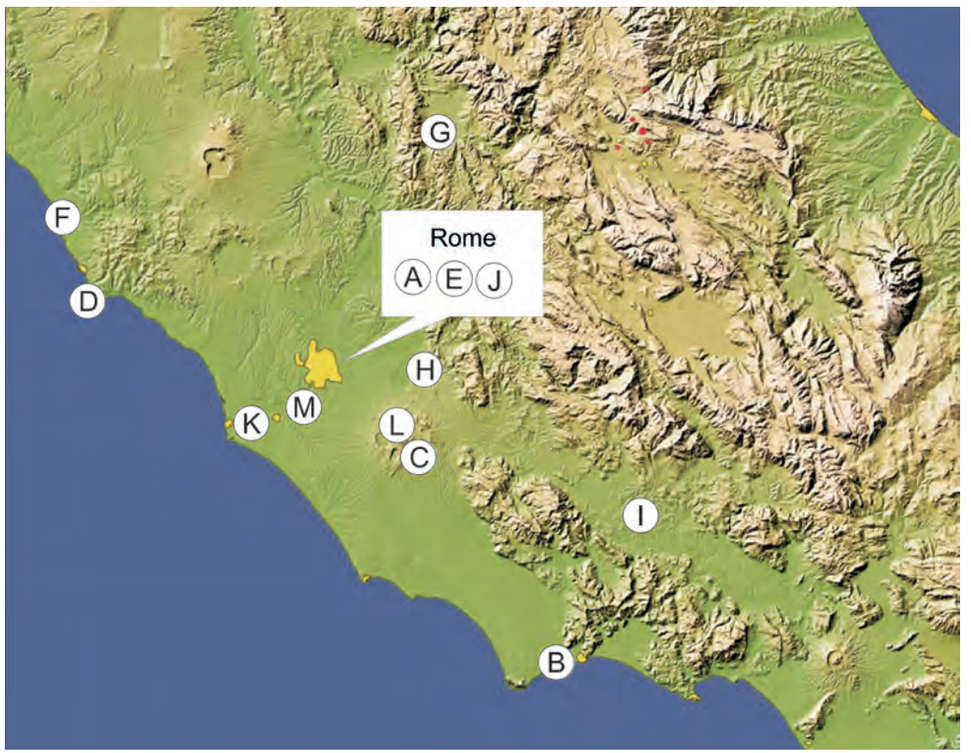
36. POST – Quaternary archives in the Northeastern Adriatic karst environments

S. Furlani (Univ. Trieste), G. Boschian (Univ. Pisa), M. Bavec (Geological Survey Slovenia)
3 days, 550€, Trieste – Pola – Trieste

37. POST – Disruptive earthquakes and surface faulting along the Norcia fault system (Mw 6.9, 1703 earthquake)

P. Galli (DPC), A. Galderisi (UniCh), M. Mancini (CNR-IGAG), P. Messina (CNR-IGAG), E. Peronace (CNR-IGAG), F. Polpetta (CNR-IGAG)
1 day 70€, Rome – Norcia – Rome

MID-CONGRESS FIELD TRIPS



A. MID – Landslide hazard in Urban Area: Visiting the Eternal City among active and remediated landslides

M. Amanti, A. Troccoli, P.M. Guarino (Geol. Survey Italy - ISPRA)
50€, Rome

B. MID – Circeo and Gaeta Promontory: between myth, prehistory and geomorphology

F. Antonioli (ENEA)
40€, Rome – Circeo – Gaeta – Rome

C. MID – The secrets of the Albano crater lake

M. Anzidei (INGV), M.L. Carapezza (INGV), G. Giordano (Univ. Roma Tre)
1 day, 100€, Rome – Albano – Rome

D. MID – Late Holocene sea level changes and the Roman fish tanks - one day field trip to Punta della Vipera (Civitavecchia)

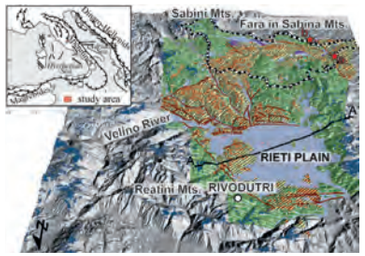
M. Anzidei (INGV), F. Antonioli (ENEA), F. Enei (Pyrgi Museum)
1 day, 100€, Rome – Civitavecchia – Rome

E. MID – The National Earthquake Center

M. Anzidei (INGV), A. Michelini (INGV)
1/2 day, 30€, Rome

F. MID – Correlating Pleistocene marine and subaerial deposits through field and seismic data using sequence stratigraphy principles: the northern Latium coast

F.L. Chiocci (Sapienza Univ. Rome), A. Sposato (CNR-IGAG), S. Milli (Sapienza Univ. Rome)
1 day, 120€, Rome – Tarquinia – Rome

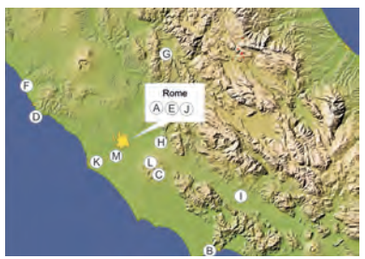


G. MID – From the Gelasian alluvial to coastal environment to the opening of the Quaternary Rieti intermontane basin

M. Della Seta (Sapienza Univ. Rome), G. Fubelli (Univ. Torino), G. Amato (CNR-IGG)
1 day, 100€, Rome – Fara in Sabina – Rieti – Rome

H. MID – Travertine deposition at Tivoli: interplay between tectonics and climate

C. Faccenna (Univ. Roma Tre), L. De Filippis (Univ. Roma Tre)
1 day, 100€, Rome – Tivoli – Rome



I. MID – Landslides in the Province of Rome

G. Fubelli (Univ. Roma Tre), G. Amato (Univ. Roma Tre)
1 day, 100€, Rome – S.Vito Romano – Rome

J. MID – The geology of Rome

G. Giordano (Univ. Roma Tre), M. Mattei (Univ. Roma Tre)
1 day, 100€, Rome

K. MID – Human impact and coastal dynamics along the Tiber delta during the last 2000 years

I. Mazzini (CNR-IGAG), M. Mancini (CNR-IGAG), V. Ruscito (ISPRA)
1 day, 100€, Rome – Ancient Ostia – Portus – Fiumicino – Rome

L. MID – The Colli Albani: a quiescent volcano on the outskirts of Rome

D.M. Palladino (Sapienza Univ. Rome), M. Gaeta (Sapienza Univ. Rome), F. Marra (INGV-Roma)
1 day, 60€, Rome – Albano – Rome

M. MID – The aggradational successions of the Paleo-Tiber River and their geochronologically constrained faunal assemblages

C. Petronio (Sapienza Univ. Rome), F. Marra (INGV)
1 day, 50€, Rome

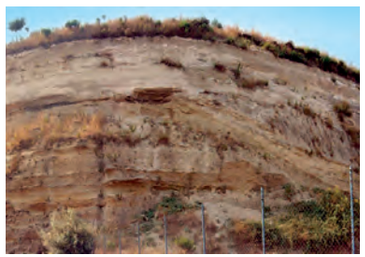


Image credits: Corda and Mariotti (2002)

G. Ponzi (the first professor of geology at Sapienza University) and his fellows planning a fieldtrip