### International Workshop on Urban Geomorphological Heritage

University of Rome 27-29 October 2016



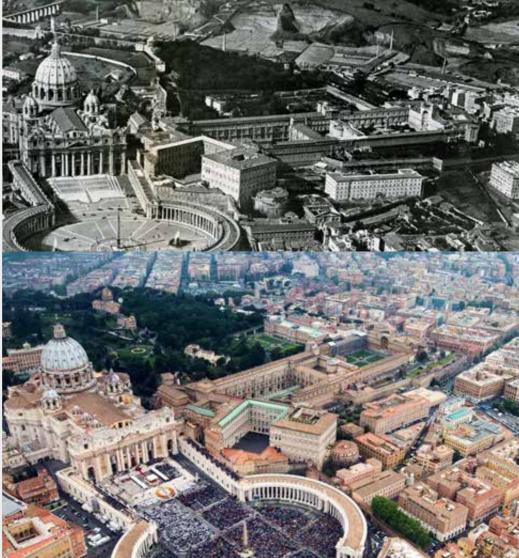
UNIL | Université de Lausanne











Photographs: above F.P. Michetti, 1911; below M. Sestini, Italian National Police, 2014

#### Organisation

University of Rome La Sapienza (Roma 1) University of Modena and Reggio Emilia University of Lausanne

With the collaboration of

International Association of Geomorphologists (IAG) Working Group on Geomorphosites (IAG) European Association for the Conservation of the Geological Heritage (ProGEO) Italian Association of Physical Geography and Geomorphology (AIGEO) Associazione Italiana di Geologia e Turismo

#### **Organizing Committee**

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#### **More information**

Alessia Pica University of Rome La Sapienza, <u>alessia.pica@uniroma1.it</u>

Paola Coratza University of Modena and Reggio Emilia, <u>paola.coratza@unimore.it</u>

Emmanuel Reynard University of Lausanne, <u>emmanuel.reynard@unil.ch</u>

Website: www.unil.ch/igd/2016/iwugh-rome

### **Objectives of the Workshop**

The human presence on the Earth increased as ever during the last two centuries and so the people migration from countryside to cities. This led to an intense urbanization of some areas, which were affected by important landscape transformation. Today's landscape is the result of gradual changes, which had to be adapted on the earlier morphology. The analysis of historical changes can help understanding how transformations will develop in the future. The evolution of urban landscapes is also interesting from a cultural point of view, and urban geomorphological heritage is often the base for the development of geotourism.

The workshop will focus on the following topics:

- geomorphological analysis in urban environment
- methodologies for the assessment and mapping of urban geomorphosites
- urban geotourism
- interpretation and popularization of urban geomorphosites
- relationships between cultural and geomorphological heritage in cities
- conservation of geoheritage and urban growth
- geoheritage and urban planning

### Public

This workshop is intended for both academics (geographers, geologists, geomorphologists,...) and urban planners and decision makers.

#### Venue

University of Rome La Sapienza (Roma 1), 27-29 October 2016

#### Language

English (without translation)

# **Intensive Course Thursday 27 October 2016** "Methods for the analysis of urban geomorphology and geomorphological heritage"

The course is focused on the methods (e.g. historical document analysis, digital data analysis, geomorphological mapping applied to urban areas, geomorphosite assessment and mapping) that can be used for assessing the urban geomorphological heritage.

It develops as a one-day practical atelier, with

- computer lab work (half day): attendants will learn how to realize a geomorphological map of a small urban area in which a peculiar landform presents values to be assessed as geomorphosite. The exercise will be developed in GIS environment and different kinds of data will be overlaid (historical and recent topographical maps, geological maps, multitemporal aerophotos). The attended results will show anthropogenic transformations of the area and geomorphological aspects recognizable;
- fieldwork in Rome (half day): attendants will survey the area analized in the morning (we will reach the area by public transport, tickets are provided). The field work will focus on the landform to be assessed as geomorphosite. Some materials of historical, archaeological, photographic, and artistic interest will be provided. Materials and direct observation will allow attendants to fill the geomorphosite assessment card. The exercise will request the attendants to focus on the peculiar evaluation of scientific and additional values of urban landforms.

#### **Program:**

Registration09:30Mapping exercise10:00 - 12:30 (a coffee break is organised)Standing lunch12:30 - 14:30Fieldwork14:30 - 17:00

The number of participants is limited (20) and young researchers have the priority. A GIS skill is preferable, candidates kindly indicate their ability (none, base, advanced) on the registration form.

Registration fee: 30€ (material, lunch, transport). Payment by bank transfer, see registration form.

#### Workshop Friday 28 October 2016 "Research and methods on urban geomorphological heritage"

#### 09:00 - 09:30 | Opening Ceremony

- Gabriele Scarascia Mugnozza, Head of Earth Sciences Department, University of Rome La Sapienza
- Mauro Soldati, Vice-President International Association of Geomorphologists (IAG)
- Paola Coratza, Chair IAG on Geomorphosites Working Group
- Paola Fredi, Executive Board Italian Association of Physical Geography and Geomorphology (AlGeo)

#### 09:30 – 11:00 | Plenary session Chairs: P. Coratza and P. Fredi

#### Urban geomorphological heritage: an overview of current research

E. Reynard (University of Lausanne), A. Pica (University of Rome La Sapienza), P. Coratza (University of Modena and Reggio Emilia)

#### The contribution of geology in historic urban landscapes

C. Margottini, D. Spizzichino (ISPRA – Istituto Superiore per la Protezione e Ricerca Ambientale, Roma)

### The toposphere: a conceptual tool for geomorphological analysis in urban environment?

C. Giusti (University of Paris-Sorbonne), D. Gramond (University of Paris-Sorbonne), Y. Gunnell (University of Lyon Lumière), G. Chemla (University of Paris-Sorbonne)

# The urban landscape of Rome: a mixture of geomorphological and cultural heritage

M. Del Monte, P. Fredi, G. M. Luberti, A. Pica, F. Vergari (University of Rome La Sapienza)

### Urban geomorphosites in the dynamic landscape – The case of the city of Wellington, New Zealand

P. Migón (University of Wroclav), E. Pijet-Migón (Institute of Tourism, Wrocław School of Banking)

11:00 - 11:30 Coffee break

#### **11:30 – 13:00 | Session Anthropic geomorphological evolution** Chairs: M. Del Monte and M. Soldati

# Geomorphology in urban coastal environment: a case study from Rapallo city (Liguria, Italy)

P. Brandolini, F. Faccini, G. Paliaga (University of Genoa)

# Photogrammetric modelling for urban mediaeval site mapping. A case study from Curtea de Argeş, Romania

B. Mihai (University of Bucharest), C. Nistor (University of Bucharest), L. Toma (University of Bucharest/GISBOX Romania SRL), I. Cârlan (University of Bucharest/GISBOX Romania SRL)

## Geomorphological controls on the evolution of Adriatic historical cities (Central Italy), determined using contemporary maps and art

C. Guerra (University of Bologna), O. Nesci (University of Urbino), P. L. Dall'Aglio (University of Bologna)

### Anthropogenic mound growth and the geomorphology of historical cities in the Venetian Plain (Italy)

P. Mozzi (University of Padova), F. Ferrarese (University of Padova), D. Zangrando (University of Padova), M. Gamba (Museo Archeologico Nazionale di Altino), A. Vigoni (Dedalo snc, Italy), C. Sainati. (Dedalo snc, Italy), A. Fontana (University of Padova), A. Ninfo (University of Padova), S. Piovan (University of Padova), S. Rossato (University of Padova), F. Veronese (Musei Civici di Padova)

## Natural stone and other geomaterials extraction in urban areas: evaluation of multiple and contradicting aspects

R. Přikryl (Charles University, Prague)

# Stone quarry in urban landscape: a feature of geoheritage. Examples from Paris and Nantes (France)

B. Commentale (University of Nantes)

13:00 - 14:30 Lunch

#### **14:30 - 16:00 | Session Urban Geomorphosites** Chairs: A. Pica and C. Giusti

# When Man build landforms: Artificial landforms and fictive cities as a new urban heritage

C. Portal (University of Poitiers)

### A tale of a city, through its urban landscape and cultural heritage in the heart of Europe: The case of Oradea (Romania)

F. Badiali (University of Modena and Reggio Emilia), D. C. Ilies (University of Oradea), D. Castaldini (University of Modena and Reggio Emilia)

#### Volcanic Geomorpho-hydro-site and balneo-climateric tourism in Băile Tușnad

I.A. Irimus, L. Bálint-Bálint, St. Dombay, A. Peteley (University of Cluj Napoca)

**Geoheritage assessment of relief forms in a modern city – The case of Ljubljana** *J. Tičar, B. Komac, M. Zorn, M. Ferk, M. Hrvatin, R. Ciglič (Slovenian Academy of Sciences and Arts)* 

#### Ancient city Drobeta. Relations between the cultural heritage and the geomorphological heritage

O. M. Neagoe (Babeş-Bolyai University)

# Examples of urban geomorphosites: the Gorge and the Tajo of Ronda (South of Spain)

J.F. Martínez-Murillo, E. Ferre-Bueno (University of Málaga)

#### 16:00 - 17:00 | Poster session + Coffee break

# Application of geohazard assessment methods to test the security of Svalbard's coastal infrastructure

M. W. Jaskólski, M. C. Strzelecki, Ł. Pawłowski (University of Wrocław)

### The Macro-Tidal Rance Estuary (Britanny, France): morphogenesis and assessment of a "Man-shaped" coastal geomorphosite?

E. Motte (University of Rennes), M.-P. Corcuff (École Nationale Supérieure d'Architecture de Bretagne), H. Régnauld (University of Rennes), C. Giusti (University of Paris-Sorbonne)

# Integrating the geomorphological heritage. A case study in Tata Province, Southern Morocco

L. M'Barki (University of Ibn Zohr), M. Benssaou (University of Ibn Zohr), M. Abioui (University of Ibn Zohr), M. Allan (University of Jordan)

# City of Kielce – "The largest museum of geology under the open sky in Europe" (Holy Cross Mountains, central Poland)

M. Górska-Zabielska (Jan Kochanowski University)

## Mapping geomorphological and cultural heritage for geotourism development, case study: Tessaout valley in central High-Atlas (Morocco)

H. Bouzekraoui (University of Rabat / Sultan Moulay Slimane University), A. Barakat (Sultan Moulay Slimane University), M. Elyoussi (University of Rabat), A. Mouaddine (Sultan Moulay Slimane University)

# The Stones of Perugia: the art of photography and the geological assessment of a city

L. Melelli (University of Perugia)

#### Urban geomorphological heritage in Cagliari City (Italy): Preliminary results

R. T. Melis, F. Montis (University of Cagliari)

# From Brocchi to Ponzi and Verri: A centura about the mapping soil geology of Rome

L. Laureti, (University of Pavia)

#### Interpretation and popularization of urban geomorphosites

M. Taabni, (University of Poitiers)

#### Urban geomorphological heritage of an Alpine town: Sion (Valais, Switzerland)

E. Reynard (University of Lausanne)

# Urban Geoheritage and Geotourism: a neglected value to conserve and promote

M. L. Rodrigues (University of Lisbon)

# The cliff of Monastir (Sahel region, Eastern coast of Tunisia): example of urban planning destroying geomorphosites

T. Ben Fraj, F. Brahim (University of Sousse)

#### Geotouristic itineraries in Bucharest city (Romania)

L. Comănescu, A. Nedelea (University of Bucharest)

### Existing and proposed urban geosites in Poznań (Poland) – Town in the river valley and on the Pleistocene morainic plateau

Z. Zwoliński, I. Hildebrandt-Radke, M. Mazurek, M. Makohonienko (University of Poznań)

### Natural stone decay in urban environment: a textbook of dynamics of the system

R. Přikryl (Charles University, Prague)

When only caverns remain: decayed town and preserved medieval underground tin mine in western Bohemia, an extreme example of "urban" geomorphology *R. Přikryl (Charles University, Prague)* 

#### 17:00 - 18:00 | Session Geotourism

Chairs: E. Reynard and P. Migón

Geoheritage is fun! Gamification in smartphone application for geoheritage promotion

L. Grangier, C. Kaiser (University of Lausanne)

### The possibilities of geotourism development in a small Polish town (Pruszków, central Masovia)

M. Górska-Zabielska (Jan Kochanowski University), R. Zabielski (Polish Geological Institute)

# Volcanic necks in the area W of Lisbon city – A geoheritage resource for the implementation of Geotourism

M. L. Rodrigues (University of Lisbon)

### Secondary geodiversity and its potential for urban geotourism: a case study from Brno city

L. Kubalíková (Czech Academy of Sciences), K. Kirchner (Czech Academy of Sciences), A. Bajer (Mendel University in Brno)

#### 18:00 - 18:15 | Conclusion

E. Reynard, A. Pica, P. Coratza

#### 20:00 | Official Dinner in a typical restaurant

#### **Registration fee**

Workshop: 50€ (payment by bank transfer, see registration form) Official Dinner: 35€ (payment in cash at the registration desk during the workshop)

#### **Fieldtrip Saturday 29 October 2016** "The geomorphological heritage of Rome"

The excursion will focus on the geomorphology of Rome, the relationships between landforms and urbanization, and the geomorphological heritage and its use for the development of urban geotourism.

The geotourist itinerary covers the Aventino Palatino and Campidoglio hills area, Tiberina Island will be the turning point to close a circular track. Lots of the most spectacular historical-archaeological sites of Rome will be looked from a geological-geomorphological point of view (Circo Massimo, Forum Boarium, Tarpeian Rock geosite, Marcello's Theatre, Tiberina Island geomorphosite, Giardino degli Aranci). The mobile application 'Geoguide Rome' (ESD Sapienza & IGD Lausanne) will support the visit such as our expert guides explanations.

Registration fee: 20€ (metro, pic-nic, material). Payment in cash at the registration desk during the workshop.

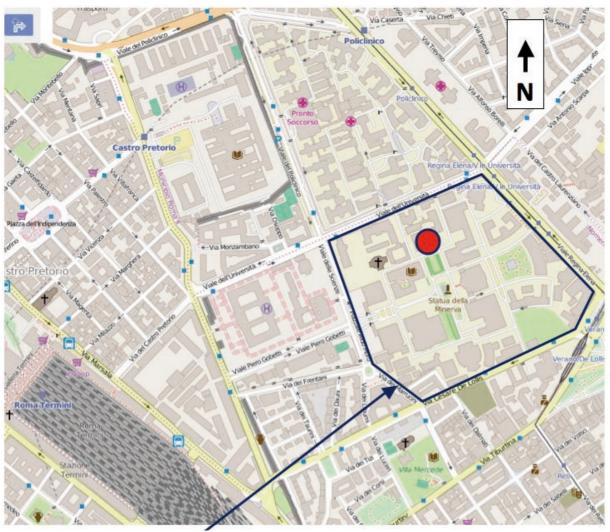
The number of participants is limited to 40. Please book in advance: the fee is due at registration desk on conference day.

The field trip start at 9 am. Meeting point at the Circo Massimo metro stop, on the metro B line at Viale Aventino-Via del Circo Massimo intersection (ahead the FAO building).

The excursion ends at 13pm at Aventino Hill. We will have a pic-nic in the park (Giardino degli Aranci).

### **Practical information:**

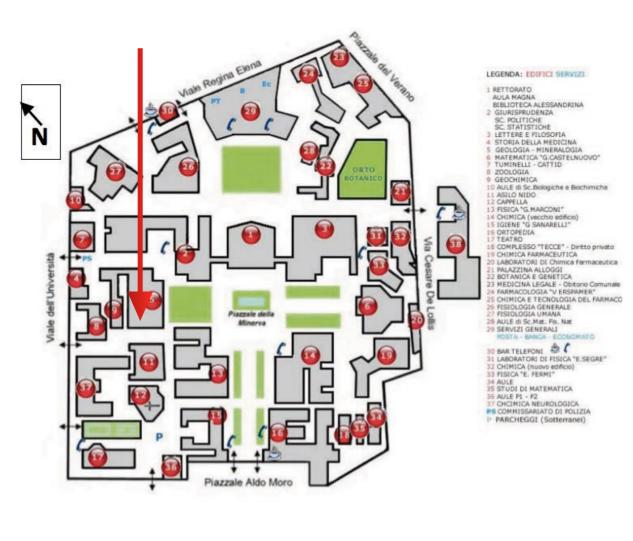
How to reach Sapienza University:



1 Sapienza University

From Termini Railway station you can reach Sapienza University

- By bus: number 310, stop at Viale dell'Università (1<sup>st</sup> or 2<sup>nd</sup> stop after crossing Viale delle Scienze)
- On foot: exit in Via Marsala and go straight along Via Marsala, then turn left on Via del Castro Pretorio, go straight until you reach the cross with Viale dell'Università. Go on along this street and reach Sapienza University after crossing Viale delle Scienze
- By Metro B:
  - Stop at Castro Pretorio, go straight along Viale CastrPretorio then turn left on Viale dell'Università, cross Viale delle Scienze and enter the Sapienza University at 2<sup>nd</sup> or 3<sup>rd</sup> way in
  - Stop at Policlinico, then go on along Viale Regina Elena and reach Sapienza University

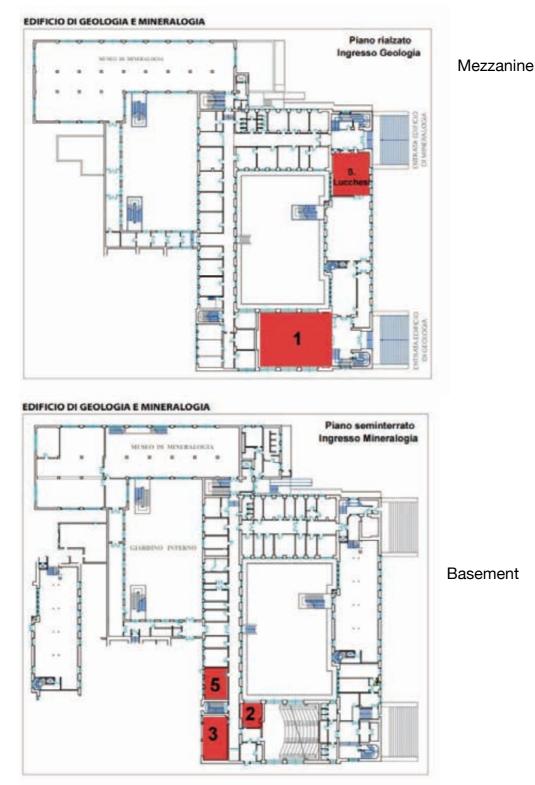


2 Sapienza University detailed Map with Earth Sciences Department

The **Intensive Course** will be held at Sapienza University, Earth Sciences Department (Mineralogy and Geology building see figure 1 ), Piazzale Aldo Moro, 5 – 00185 Rome Room n. 5 basement (see figure 3)

The **Conference** will take place at Sapienza University, Earth Sciences Department (Mineralogy and Geology building see figure 1 ), Piazzale Aldo Moro, 5 – 00185 Rome Room Lucchesi mezzanine (see figure 3)

INTERNATIONAL WORKSHOP on Urban Geomorphological Heritage



 $<sup>\</sup>textbf{3} \text{ Earth Science Department (Geology and Mineralogy building) Plan}$ 

#### **Deadline for registration: 15 September 2016**

to christelle.monnet@unil.ch (please, use the registration form)