



IAG/AIG-WG-TG Summer School 2016 on “Alps vs Apennines: Tectonic Geomorphology of Mountains ”

*Italy: Western Alps (Peveragno, CN) – Central Apennines (Assergi, AQ)
July 2-9, 2016*



Aim and scope

The IAG-WG-TG Summer School 2016 is a training schools for students and early career scientists involved in tectonic geomorphology studies. It aims to offer a comprehensive overview of pioneering techniques, innovative and multidisciplinary approaches for meeting the growing needs of knowledge on both long term tectonic uplift and sudden geomorphological changes.

The Summer School includes lectures (2 days), laboratory and field activities (4 days). A group of expert teachers from different countries will present the state of the art on Morphotectonics and related methods (thermochronology, dynamic topography, geomorphometry and geomorphological mapping, radar interferometric applications, crustal mobility and seismotectonics, neotectonics and slope instabilities). Case studies from a diversity of geomorphotectonic environments will be analyzed and discussed. A rich

program of field activity will be developed both in the Western Alps, symbol of a long-term evolution orogen, and in central Apennine, where recent seismic activity (L'Aquila earthquake, 2009) caused casualties, damages and sudden geomorphological changes.

Summary of the context

The scientific debate on long-term tectonic uplift phenomena and sudden geomorphological changes is of overall great importance within Earth Sciences. Topics such as:

- uplift evaluation methods: thermochronology, geomorphometry, geodesy, geodiversity of tectonic processes and contexts;
- seismotectonic processes, structures and related landforms: structural geology and geomorphology, paleoseismology, seismology;
- slope instabilities and related risks: engineering geology, modelling, geothematic mapping

have been discussed in several separate sessions during the past conferences.

The need of interdisciplinary and field based formation lead the IAG-WG on Tectonic Geomorphology to this Summer School proposal. The Italian partners of IAG-WG offered the locations for encompassing most of the summer school topics in mountain contexts of higher geodiversity.

Venue

Department of Earth Sciences, University of Turin, Italy.

Organizing Committee

Marco Bacenetti - Università degli studi di Torino, Italy; **Marta Della Seta** - Università di Roma “La Sapienza”, Italy; **Emanuela Falcucci** - INGV, Istituto Nazionale di Geofisica e Vulcanologia, Italy; **Paola Fredi** - Università di Roma “La Sapienza”, Italy; **Giandomenico Fubelli** - Università degli studi di Torino, Italy; **Fabrizio Galadini** - INGV, Istituto Nazionale di Geofisica e Vulcanologia, Italy; **Marco Giardino** - Università degli studi di Torino, Italy; **Stefano Gori** - INGV, Istituto Nazionale di Geofisica e Vulcanologia, Italy; **Luigi Perotti** - Università degli studi di Torino, Italy; **Francesco Troiani** - Università di Roma “La Sapienza”, Italy; **Andrea Wolter** - ETH Zürich

Scientific Committee

John Clague - Simon Fraser University, Burnaby, Canada; **Tim Davies** - University of Canterbury, Christchurch, New Zealand; **Monique Fort** - Paris Diderot University, France; **Paola Fredi** - University of Roma “La Sapienza”, Italy; **Fabrizio Galadini** - INGV, Istituto Nazionale di Geofisica e Vulcanologia, Italy; **Marco Giardino** - University of Turin, Italy; **Efthimios Karymbalis** - Harokopio University of Athens, Greece.

Summer School Secretariat

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Auspices

The Summer School is organized under the auspices of:

International Association of Geomorphologists (IAG)
Associazione Italiana di Geografia Fisica e Geomorfologia (AIGeo)
Università degli Studi di Torino
Università “La Sapienza”, Roma
Istituto Nazionale di Geofisica e Vulcanologia (INGV)

Provisional Programme

Saturday, July 2, 2016: arrival of participants in **Turin**, registration, icebreaker reception.

Sunday, July 3, 2016: field trip in the Ligurian Alps.

Monday/Tuesday July 4-5, 2016: lectures and laboratory activity.

Wednesday, July 6, 2016: transfer to Central Italy and overnight L'Aquila urban trip

Thursday, July 7, 2016: geomorphological mapping in the Gran Sasso areas

Friday, July 8, 2016: analysis of paleoseismologic trench, morphological evidences of active tectonics

Saturday, July 9, 2016: large scale landscape evolution in active tectonic context

Farewell party and departure from **Rome**

Invited speakers

Doug Burbank, ERI-UCSB, USA - Lecture 1: Tectonic geomorphology of mountains: principles, methods, and milestones examples on morphotectonics.

Monique Fort, Paris Diderot University, France - Lecture 2: Alps Himalaya: key-studies on morphotectonics.

Yann Rolland, Nice University - Lecture 3: Uplift evaluation methods: geochronology

Michele Morelli, ARPA-Piemonte, Italy - Lecture 4: Radar Interferometric applications for geomorphometry.

John Clague, Simon Fraser University - Lecture 5: Crustal mobility and seismotectonics of the Pacific NW

Ben Van Wik de Vries, Univ Blaise Pascal, Clermont-Ferrand, France – Lecture 6: Interaction of endogenetic and exogenetic processes on volcano stability.

Andrea Festa, DST-UniTO, Italy - Lecture 7: Structural patterns and tectonic history of the Apennines.

Francesco Dramis, UniRoma Tre, Italy - Lecture 8: Geomorphology of the Apennines.

Zbigniew Zwolinski and Alicja Najwer, AMU, Poland – Lecture 9. Geomorphological mapping, geomorphometric analysis and assessment of geodiversity using geomorphometry

Summer School Fees

(including material, travels, accommodation and meals.)

Early bird payment (before April 29, 2016)

Participants

650 € (single room*), 600 (double room)

Full payment (April 30 to June 15, 2016)

Participants

800 € (single room*), 750 (double room)

*Availability of single rooms is limited.

Participants are required to pay the fees by bank transfer (**see the attached registration form**)

Deadlines

Early bird registration
Full registration

April 29, 2016
June 15, 2016

How to reach Turin

Torino International Airport: <http://www.aeroporto.torino.it/en>
High speed railway: <http://www.trenitalia.com/tcom-en>

Second Circular

The second circular will be issued by the end of March 2016.

Further information may be found on the IAG WG on Tectonic Geomorphology website:

www.geomorph.org/wg/wgtg.html