

Program of 9th Alpine Workshop at Cogne / Italy on 16th-18th September 2009

Note that the program shown below is subject to change

Sunday-Monday, 14-15. Sept.

Pre-conference field trip to the Sesia Zone and adjacent units (M. Handy, R. Compagnoni, M. Konrad-Schmolke) leaves Cogne in the early morning of Monday, Sept. 14 and arrives back in the late afternoon of Tuesday, Sept. 15

Tuesday evening, the 15th:

- Registration (15:00 - 19:00) – Registration is in the downstairs front office of the *Centro Congressi*
 - Icebreaker Party (19:00 -) - The Icebreaker will be held in the *Hotel Sant'Orso*, next to the *Centro Congressi* and just off the main street in Cogne. It will be held outdoors if the weather is good.
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Wednesday, the 16th:

Registration office opens at 7:30 - Registration is in the downstairs front office of the *Centro Congressi*

Welcome (8:45 - 9:00)

Session 1 (8:45 - 10:30) **Deep structure – Transitions in time and space between Alpine orogens:**

- 9:00 - 9:30 *Relations between upper crustal geology and lithosphere/asthenosphere and deeper mantle structure*
Invited speaker: Clark B. Burchfiel (MIT, Cambridge, USA)
- 9:30 - 9:50 *Orogenic processes and the Alps/Apennines geodynamic evolution- insights from the Taiwan orogen*
G. Molli and J. Malavieille
- 9:50 - 10:10 *From Jurassic Rifting to Alpine inversion – How well constrained is the pre-Alpine paleogeography*
G. Manatschal, G. Mohn, E. Masini, M. Beltrando, H. Masson
- 10:10 - 10:30 *Preservation of an ocean-continent transition zone in the Eclogitic Piemonte Unit: implications for the dynamics of orogens*
M. Beltrando, D. Rubatto and G. Manatschal

Coffee Break (10:30 - 11:15)

Session 2 (11:15 - 12:45)

- 11:15 - 11:45 *Subduction and mountain building: a Mediterranean view*
Invited Speaker: Claudio Faccenna (Univ. Roma Tre) and J.P. Brun
- 11:45 - 12:05 *Paleogene thrusting in the western Rhodopes (SW Bulgaria)*
S. Jahn-Awe, N. Froitzheim, T. Nagel, D. Frei, B. Fügenschuh, N. Georgiev, J. Pleuger

- 12:05 - 12:25 *Analogue modelling of continental subduction – implications for Alpine crustal deformation*
S. Luth, E. Willingshofer, D. Sokoutis
- 12:25 - 12:45 *An independent plate motion path for the Adriatic microplate and its consequences for the tectonics of Alpine Tethyan subduction*
M.R. Handy, R. Bousquet, E. Kissling, D. Bernoulli, S.M. Schmid

Lunch (12:45 - 14:00)

Posters and Tea (14:00 - 16:00)

Session 3 (16:00 - 17:10) **Plate motions, seismicity and neotectonics. How compatible are they?**

- 16:00 - 16:30 *What do we learn from extensional neotectonics in the Western Alps?*
Invited speaker: Christian Sue (Brest)
- 16:50 - 17:10 *The new Tithonian-Maastrichtian polar wander path for stable Adria based on direct paleomagnetic results from the foreland of the Southern Alps and from autochthonous Istria*
E. Marton, D. Zampieri, P. Grandesso, V. Cosovic, Alan Moro
- 17:10 - 17:30 *The tauern window – the missing link of the Variscan internal zone between Corsica, the External Massifs, Bohemian Massif and the Tisia Terrane (Hungary)*
P. Vesela, F. Finger, F. Söllner, A. Gerdes

Posters (17:10 - 18:30)

Pre-dinner talk (19:00) *The contribution of Rudolph Trümpy to Geosciences in a historical context* (title to be announced)

Celal Sengör (Technical Univ. of Istanbul)

The pre-dinner talk will be held at the *Centro Congressi*. After his talk, we will proceed together directly to dinner in the *Hotel Bellevue*.

Workshop Dinner (20:30 -)

Thursday, the 17th:

Session 4 (9:00 - 10:30) **Modeling Alpine orogens – From plate kinematics to dynamics.**

- 9:00 - 9:30 *Numerical models of subduction-driven continental subduction – a review*
Invited speaker: Jean Braun (Grenoble)
- 9:30 - 9:50 *Lateral shifts of exhumation and deformation fronts in the Alps – surface or lower crustal controls?*
C.L. Rosenberg and A. Berger
- 9:50 - 10:10 *Tectonic or climate control on exhumation of the external crystalline massifs, Alps*
C. Glotzbach, C. Spiegel, P. van der Beek
- 10:10 - 10:30 *HP-UHP metamorphism as an indicator of slab dip variations in the Alpine arc.*
F. Gueydan, N. Carry, J.-P. Brun, D. Marquer

Coffee Break (10:30 - 11:15)

Session 5 (11:15 - 13:00) Sedimentary basins in the Alps as archives for climatic and tectonic events.

- 11:15 - 11:45 *Three dimensional history of plate flexure around the Western Alpine arc*
Invited Speaker: Mary Ford (Nancy), S. Bourlange, N. Leseur, O. Bourgeois
- 11:45 - 12:05 *Past and present tectonics of the western Alpine Molasse Basin between Jura and Prealpes Klippen*
J. Mosar, T. Ibele, E. Matzenauer
- 12:05 - 12:25 *Characterization of active tectonics in the Adriatic offshore and External Dinarides of Croatia*
B. Tomljenovic, M. Herak, D. Herak, K. Kralj, B. Matos
- 12:25 - 12:45 *Permo-Triassic tectonic evolution of the Eastern Alps – What does it mean?*
F. Neubauer and J. Genser

Lunch (12:45 - 14:00)

Session 6 (14:00 - 15:20) The role of climate in the Alpine evolution – From facts to ideas and back.

- 14:00 - 14:30 *The role of climate in mountain evolution - what about vegetation?*
Invited speaker: Volker Mosbrugger (Senckenberg Museum/Frankfurt)
- 14:30 - 15:00 *Vulnerability of the Alpine landscape in the light of ongoing climate change*
Invited speaker: Fritz Schlunegger (Bern), P. Molnar, M. Stoffel
- 15:00 - 15:20 *An unaltered paleosurface (regolith) preserved since Oligocene time on top of the Sesia Zone, western Italian Alps*
N. Kapfer, I. Mercolli, A. Berger
- 15:00 - 15:20 *Detrital fission-track geochronology, provenance studies and modern erosion rates in the Alps*
M. G. Malusà, S. Andò, E. Garzanti, M. Limoncelli, M. Padoan, A. Resentini, G. Vezolli (Milano-Bicocca)

Posters and Tea (15:20 - 17:30)

Session 7 (17:30 - 18:30)

- 17:30 - 17:50 *Balanced section through the Eastern Alps*
B. Lammerer and P. Veselà
- 17:50-18:10 *Switch of kinematics in the Austroalpine basement between the Deferegggen- Antholz-Vals (DAV) and the Pustertal-Gailtal fault*
M. Linner, G. Habler, B. Grasmann
- 18:10-18:30 *Evidence of Jurassic rifting in the Dent Blanche nappe (near Cignana, Italy)*
P. Manzotti, D. Regis, B. Cenki-Tok, M. Robyr, D. Rubatto, T. Thomsen, M. Zucali, M. Engi

Posters (18:40 – 19:40)

**Public Lecture (21:00): *Dall'oceano alla Catena Alpina: la storia del giacimento a magnetite di Cogne*
by **Roberto Compagnoni (Torino)****

Friday, the 18th:

Session 8 (9:00 - 10:30) **Metamorphic structure of the Alps – What parts of the Alpine history does it preserve?**

- 9:00 - 9:30 *Deciphering the geodynamic evolution of the Alps- What is the contribution of metamorphic petrology?*
Invited speaker: Romain Bousquet (Potsdam)
- 9:30 - 9:50 *Assembling UHP metamorphic terrains in the Alps and Rhodopes*
T. Nagel, N. Froitzheim, M. Janak, S. Schmidt, S. Sandmann, F. Kirst, D. Herwartz, M. Kirchenbaur
- 9:50 - 10:10 *The Schneeberg fault and its relation to the Vinschgau shear zone – the western termination of the Cretaceous high-pressure belt*
B. Fügenschuh, D. Floss, R. Speckbacher
- 10:10 - 10:30 *Distribution of Late Paleozoic metamorphism in the Eastern Alps: Variscan continental collision and Permian extension*
R. Schuster, M. Linner, M. Thöni, U. Klötzli

Coffee Break (10:30 - 11:00)

Session 9 (11:00 - 11:30) **Timing and rates of Alpine processes**

- 11:30 - 12:00 *Petrochronology in the Central Alps – Results, implications, gaps*
Invited speaker: Martin Engi (Bern)
- 12:00 - 12:20 *Timing of final collisional stages and exhumation rates in orogenic belt from zircon, (U-Th)/He dating (Ligurian Alps, northern Italy)*
M. Maino, G. Dallagiovanna, K.J. Dobson, L. Gaggero, C. Persano, S. Seno, F.M. Stuart
- 12:20 - 12:40 *Alpine orogenic evolution from subduction to collisional thermal overprint – ⁴⁰Ar/³⁹Ar age constraints from the Valais domain*
M. Wiederkehr, M. Sudo, R. Bousquet, A. Berger, S.M. Schmid
- 12:40 - 13:00 *Reconstruction of distinct faulting events in the Eastern Alps by low-temperature geochronology*
W. Kurz and A. Wöfler

Last words (13:00 - 14:00) Closing remarks, Decision on location of the next Alpine Workshop

Post-conference field trip leaves at 14:30

Friday - Saturday, 18-19. Sept

Post-conference field trip to the Gran Paradiso Nappe (M. Ballèvre, B. Le Bayon, P. Yamato) leaves Cogné after the workshop in the early afternoon of Sept. 18 and returns to Cogné in the late afternoon of the next day, Saturday, Sept. 19