

IMPORTANT DATES

WORKSHOP IWIC-V: 16 - 23 September 2012

Paper submission: 30 November 2012

5thINTERNATIONAL
WORKSHOP
ON ICE CAVES

PAPER SUBMISSION

Papers will be published in "Geografia Fisica e Dinamica Quaternaria," the new ISI on-line Journal on Physical Geography and Geomorphology. Papers must be submitted no later than 30 November 2012.

Submitting a paper to GFDQ – Instruction to Authors

<http://gfdq.glaciologia.it/submitting/>

WORKSHOP FEES	Full	Students
Fee	300 Euro	240 Euro
Accompanying persons	180 Euro	
Daily fee	60 Euro	
Pre-workshop excursion	30 Euro	

16 - 23 September 2012
Barzio (LC), Valsassina, Grigna and Milano - Italy



COMUNITA' MONTANA
VALSASSINA, VALVARRONE,
VAL D'ESINO E RIVIERA



UNIVERSITA' DEGLI STUDI
DI MILANO - BICOCCA
Dipartimento di Scienze dell'Ambiente
e del Territorio



UNIVERSITA' DEGLI STUDI
DI MILANO
Dipartimento di Scienze della Terra
"Armando Dazio"



Photo Mangiagalli

OFFICIAL WEBSITE

<http://users.unimi.it/icecaves/IWIC-V/>

ORGANIZING SECRETARY

Parco Regionale della Grigna Settentrionale
Comunità Montana Valsassina Valvarrone Val d'Esino e
Riviera

Via Fornace Merlo, 2 - 23816, Barzio (LC) ITALY

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SCIENTIFIC COMMITTEE

- Alfredo Bini - Univ. Milano, IT
- Zoltàn Kern - Univ. Bern, CH
- Valter Maggi - Univ. Milano-Bicocca, IT
- Aurel Perşoiu - Univ. Suceava, RO
- Andreas Pflitsch - Univ. Bochum - D
- Stefano Turri - GeoSFerA, IT
- George Veni - NCKRI - USA

- President
- Member
- Member
- Member
- Member
- Member
- Member



WHY IWIC

IWIC is a series of workshops devoted entirely to ice cave research. After meetings in Romania, Slovak Republic, Russia, and Austria, Italy now hosts this unique workshop. We offer a place to examine the state-of-the-art, discuss ongoing research efforts, and boost international cooperation. We will explore interest for future research projects and define a general strategy for ice cave studies and management. IWIC-V is an ideal opportunity to widen communication among interested researchers and highlight important research results. IWIC-V is organized under the auspices of the Glacier, Firn, and Ice Caves Commission of the International Union of Speleology, AIGEO and the Italian Glaciological Committee.

SCIENTIFIC SECRETARY

Stefano Turri: GeoSFerA - Studio Associato di Geologia
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THEMES OF WORKSHOP

- Cave glaciology/ice dynamics
- Cave meteorology/climatology
- Cryo-mineralogy and cryo-crystallography
- Paleoclimatology and global change
- Chemistry and geochemistry of ice caves
- Ice cave management and technology

ORAL and POSTER presentations are welcome. The workshop official language is English.

Special sessions will organize for groups interested in scientific discussions to explore different topics or project activities.

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Programme:

Sunday, September 16, 2012

- 12.00** Open IWIC registration desk
14.30 - 20.00 Pre-workshop excursion on Como Lake by boat.
"The geological setting of Grigne Massif and the evolution of Como Lake" by Zuccoli and Bini
- 20.00 - 22.00** Ice-breaker party in Comunità Montana Valsassina Valvarrone Val d'Esino e Riviera

Monday, September 17, 2012

- 09.30 - 10.00** Welcome Ceremony
- INTRODUCTION TO ITALIAN ICE CAVES**
- 10.00 - 10.20** **Turri, Bini, Maggi** - Ice caves scientific research history: from Leonardo da Vinci to the end of 1800
- 10.20 - 10.40** **Menichetti, Salvatori, Poderini** - Ice caves in Central Italy
- 10.40 - 11.00** Coffee Break
- CAVE GLACIOLOGY AND ICE DYNAMICS**
- 11.00 - 11.20** **Grebe, Pflitsch** - Ice cave research - from a phenomenon to modern research
- 11.20 - 11.40** **Colucci, Forte, Guglielmin** - Underground cryosphere in the Monte Canin Massif, Alpi Giulie (Italy)
- 11.40 - 12.00** **Pflitsch, Schörghofer, Smith** - Exploration of Ice Caves on Mauna Loa, Hawaii
- 12.00 - 12.20** **Yang, Shi** - The numerical simulation of a saving mechanism of Ice Cave in Ningwu, China
- 12.20 - 14.00** Lunch
- 14.00 - 14.20** **Stepanov, Kichigin, Tainitsky** - Investigation of ice thickness in the Urals caves using Georadar
- CRYO-MINERALOGY AND CRYO-CRYSTALLOGRAPHY**
- 14.20 - 14.40** **Kalinina, Tchaikovskiy, Kadebskaya** - Mineral crusts at the surface of lakes of warm and cold zones in the Kungur Ice Cave
- 14.40 - 15.00** **Kadebskaya** - Cryogenic minerals of some ice caves of the Urals
- 15.00 - 15.20** Coffee Break
- GLACIAL CAVES**
- 15.20 - 15.40** **Tognini** - Role of subglacial caves in the evolution of glacier in the snout area: two examples on the Forni Glacier (Valtellina, I) and Morteratsch Glacier (CH)

- 15.40 - 16.00** **Mavlyudov** - Glacial caves of the Bellingshausen Dome and adjacent areas, King George Island, South Shetland Islands, Antarctica
- 16.00 - 16.20** **Ferrario** - A new register for the glacial caves
- 16.20 - 16.40** **Tognini** - Evidence of a subglacial lake in a contact cave on the Forni Glacier (Valtellina, I)
- 16.40 - 18.00** Discussion and poster session
- 19.00** Dinner in hotel
- 21.00 - 23.00** **SPELEOLOGICAL PRESENTATION (video and photo)**
"Underground Lombardy: a trip inside the main Lombard cave systems" by FSLo Federazione Speleologica Lombarda
- Tuesday, September 18, 2012
- CAVE METEOROLOGY AND CLIMATOLOGY**
- 09.20 - 09.40** **Böckler, Pflitsch, Killing-Heinze** - A comparison of temperature data loggers and measuring sensors of different price levels and construction types to test their reaction time, accuracy and applicability in cave research
- 09.40 - 10.00** **Kosutnik** - Temperature monitoring in Slovene Ice Caves examples, results and discussion
- 10.00 - 10.20** **Holmgren, Pflitsch** - Talus & Gorge Glacier past to present - A historical and microclimatological research in the Northeastern United States
- 10.20 - 10.40** **Korzystka, Piasecki, Sawiński, Zelinka** - "Chimney effect" and its influence on the thermal conditions of the Dobšinská Ice Cave
- 10.40 - 11.00** Coffee Break
- 11.00 - 11.20** **Morard, Bochud, Delaloye** - Ice mass and frozen ground in permeable ventilated systems: comparison between a dynamic ice cave and overcooled talus slopes in western Switzerland
- 11.20 - 11.40** **Mihevc** - The influence of the ice caves on climate of karst depressions – case of low altitude permafrost at Smrekova draga, Trnovski gozd, Slovenia
- 11.40 - 12.00** **Pflitsch, Grebe, Grudzielanek** - About the use of thermal cameras in cave micrometeorological studies
- 12.00 - 12.20** **Rojšek** - Cave ice in Velika ledena jama v Paradani, Slovenija

- 12.20 - 14.00** Lunch
- PALEOCLIMATOLOGY AND GLOBAL CHANGE**
- 14.00 - 14.20** **Perşoiu, Bojar** - $\delta^{13}\text{C}$ in cave ice: a new proxy for palaeoprecipitation reconstructions
- 14.20 - 14.40** **Shu, Jin, Huang, Zhang, Wu** - China's anti-season ice caves
- 14.40 - 15.00** **Maggi, Turri, Bini, Perşoiu, Onac, Stenni, Udisti** - Two millennia of natural to antropogenic effects in Transylvania from Focul Viu ice core

CHEMISTRY AND GEOCHEMISTRY OF ICE CAVE

- 15.00 - 15.20** **Kern, Széles, Bočić** - Lead concentrations and stable lead isotopes from a Croatian cave ice profile
- 15.20 - 15.40** Coffee Break
- 15.40 - 16.00** **Sattler, Standhartinger, Hoover, Wendlinger, Spötl, Psenner** - Microbiology in Alpine and Antarctic Ice and Glacier Cave
- 16.00 - 16.20** **Trushkova** - Research of air ion composition of Kungur Ice cave atmosphere

ICE CAVE MANAGEMENT AND TECHNOLOGIES

- 16.20 - 16.40** **Byun** - Advanced use of ice caves as water storage
- 16.40 - 17.00** **Korzystka, Piasecki, Sawiński, Zelinka** - Human impact on the ice cave climatic environment - case study from entrance area of the Dobšinská Ice Cave
- 17.00 - 17.25** **Pflitsch** - Presentation of IWIC-VI in the USA
- 17.25 - 18.00** Discussion and poster session
- 19.00** Dinner in hotel

- 21.00 - 23.00** **SPELEOLOGICAL PRESENTATION (video and photo)**
- "Grigna caves: the deep heart of the mountain" by In Grigna!

Wednesday, September 19, 2012

FIELD EXCURSION*

- 7.30** Helicopter travel from Barzio to Rifugio Brioschi (Brioschi Refuge) (2410 m). The first day of field excursions will be in the Moncodeno karst area in the northern side of Grigna Mountain. This is the principal location of ice caves in this area. It may be possible, for those with vertical caving equipment, to enter some shafts.
- "The karst of Moncodeno area, Italian Alps" by Bini, Pellegrini and Zuccoli

Remember mountain equipment, Moncodeno is a high mountain Karst area.

- 19.00** Dinner, discussions and accommodation in Rifugio Bogani (Bogani Refuge) (1816 m)

Thursday, September 20, 2012

FIELD EXCURSION*

- 09.30** Second day of field excursion is also in the Moncodeno karst area. We will visit Moncodeno Ice Cave, the famous cave visited and described by Leonardo da Vinci and Stenone

- 19.30** Dinner, discussions, closing ceremony of IWIC-V and accommodation in Rifugio Cainallo (Cainallo Refuge) (1290 m)

Friday, September 21, 2012

- Transfer to Milano - Bicocca University during the morning
Other Scientific talks and visit the new "**Ice Lab**" in Milano.
Lunch in Milano – Bicocca University
Closure of workshop
Possible start for post-Workshop field trip

September 21 - 23, post-workshop Excursion

HOW TO GET TO IWIC-V

1) if you arrive in Italy **by airplane** you can arrive in one of the three airports near Milan:

a) **Linate (LIN)**: in this case you will arrive at Milano Centrale railway Station (**CENTRALE FS**) by bus (**AIR BUS**)

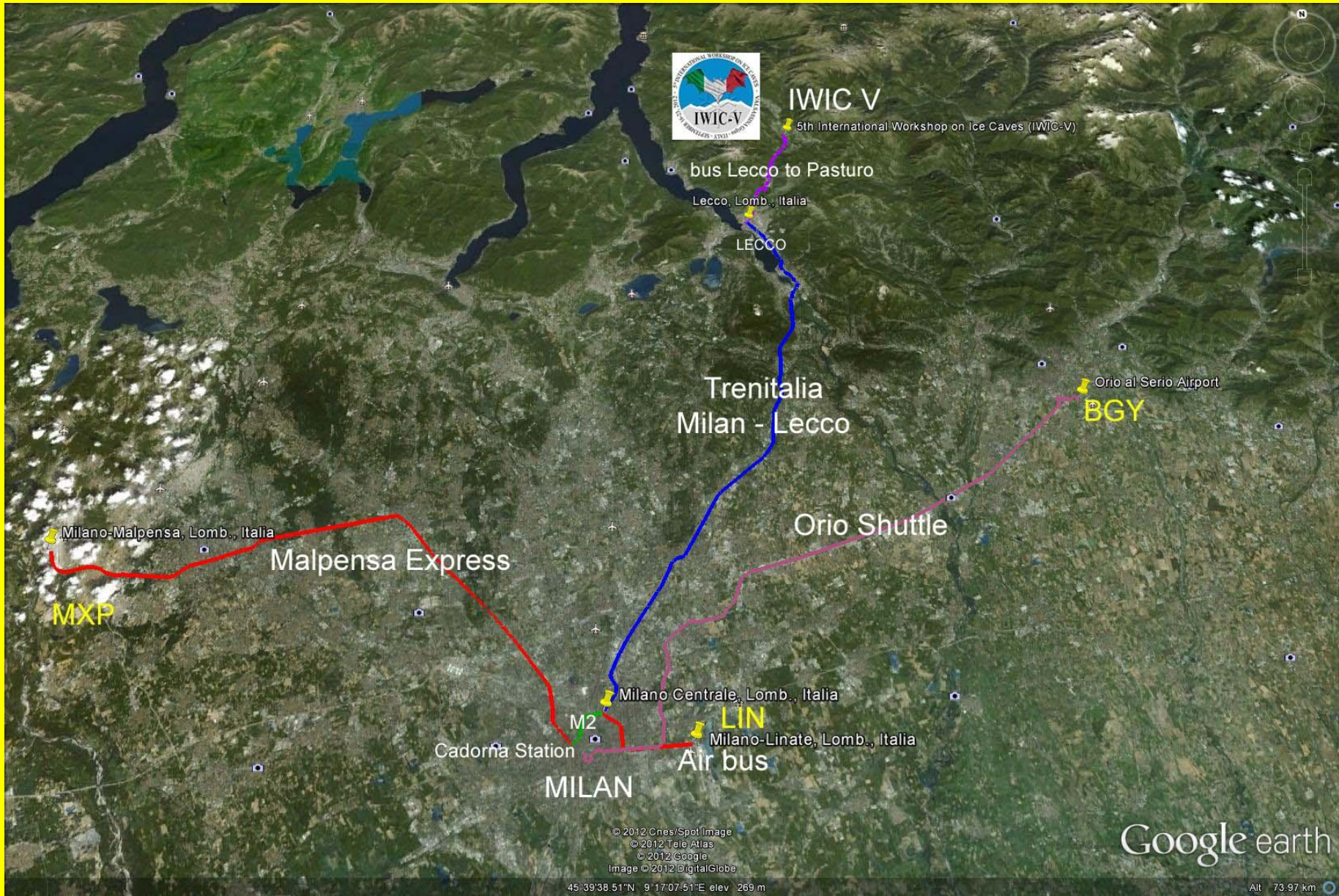
b) **Malpensa (MXP)**: in this case you will arrive at Milano Centrale railway Station (**CENTRALE FS**) directly by train (**MALPENSA EXPRESS**) or at **Milano Cadorna FNM** Station by train and then from Cadorna to Central Station (**CENTRALE FS**) by underground (underground green line **M2**, direction Cascina Gobba/Cologno/Gessate)

c) **Orio al Serio International Airport (BGY)**: in this case you will arrive at Milano Centrale railway Station (**CENTRALE FS**) by bus (**ORIO SHUTTLE**)

from Milano Centrale Station (**CENTRALE FS**) to Lecco by train
from **Lecco (PIAZZALE STAZIONE)** to **Pasturo (PASTURO BIVIO)** (Valsassina) by Bus → **IWIC**

2) if you arrive in Italy **by train** you will arrive at Milano Centrale Station (**CENTRALE FS**)
from Milano Centrale Station (**CENTRALE FS**) to Lecco by train
from **Lecco (PIAZZALE STAZIONE)** to **Pasturo (PASTURO BIVIO)** (Valsassina) by Bus → **IWIC**

*organize your backpack for two days of field excursion. Your baggage will reach you at the end of the second day in Rifugio Cainallo



<http://users.unimi.it/icecaves/IWIC-V/>