We invite applications to the Third ISPET Seminar on "High and Ultrahigh Pressure Metamorphism: A Window on Subduction Processes".

**Period:** June 20 (arrival) – June 25 (departure)

**Venue:** Hotel Terme San Marco, Monte Ortone (PD) – Italy

**Participants:** The School is limited to 30 participants at graduate level, with priority for students from partner institutions (two for each partner)

**Program:** The Seminar will consist of five days of lectures; an afternoon poster session is planned to enable the participants to present and discuss their research topics and results.

**Topics** covered in the Seminar will include: Modelling Subduction Zones and the Experimental Approach to Phase stability and fluid transfer; Slab devolatilization, fluid budgets, nature and compositions of released fluids; Fluids in high and very high pressure rocks and mechanisms of fluid/rock element exchange; Textures and mineralogy of natural high and ultrahigh pressure rocks; Pressure-temperature-time evolutions and exhumation processes of high and ultra high pressure rocks.

**Preliminary list of lecturers:**

- Taras Gerya (ETH - Zürich, Switzerland); Max Schmidt (ETH Zürich, Switzerland); Patrizia Fumagalli (Univ. Milano, Italy); Paola Comodi (Univ. Perugia, Italy); Stefano Poli (Univ. Milano, Italy); Pascal Philippot (IPG Paris, Fr); Zachary Sharp (Univ. New Mexico, U.S.A.); Marco Scambelluri (Univ. Genova, Italy); Maria Luce Frezzotti (Univ. Siena, Italy); Joerg Hermann (RSES, Canberra, Australia); Roberto Compagnoni (Univ. Torino, Italy); Gaston Godard (CNRS UMR 7097 – IPGP, Paris, Fr); Hermann Von Roermund (Utrecht University, The Netherlands); Gisella Rebay (Univ. Pavia, Italy); Daniela Rubatto (ANU Canberra, Australia); Alexei Perchuk (Ruhr-University, Bochum, Germany)

**Registration Fee:** €250.00 covering accommodation, full-board treatment and teaching material. We expect to be able to give students a small contribution to travel expenses.

**Important Deadlines:**

- **25 April:** Application, by email, filling the form which can be downloaded at: http://www.dmp.unipd.it/ISPET/form.doc
- **10 May:** Notification of accepted applications
- **20 May:** Circular with final program and technical details

**Scientific Committee**

Bernardo Cesare, Roberto Compagnoni, Joerg Hermann, Pascal Philippot, Stefano Poli, Marco Scambelluri

**Organizing Persons**

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**ISPET Web Site:** http://www.dmp.unipd.it/ISPET/index.php
Third ISPET Doctorate School
High and Ultrahigh Pressure Metamorphism: A Window on Subduction Processes
Monte Ortone (Italy), June 20-25 2004

Scientific Committee: Marco Scambelluri, Roberto Compagnoni, Joerg Hermann, Pascal Philippot, Stefano Poli,
Organizing Persons: Marco Scambelluri, Bernardo Cesare

Preliminary Program and Talks

SUNDAY JUNE 20 2004, Afternoon: Arrival

FIRST DAY, MONDAY JUNE 21 2004

Modelling Subduction Zones: The Experimental Approach to Phase stability and fluid transfer

Taras Gerya, Geologisches Institut, ETH - Zürich, Switzerland
Dynamics and structure of subduction zones and exhumation of (U)HP rocks: insight from 2D numerical modeling and visualization

Max Schmidt, Institute for Mineralogy and Petrology, ETH Zürich, Switzerland
Experimental strategies for simulating high-pressure processes

Patrizia Fumagalli, Dipartimento Scienze della Terra, Milano, Italy
Phase relations in mantle rocks

Paola Comodi, Dipartimento Scienze della Terra, Perugia, Italy
Mineralogy and structure of minerals at high and ultrahigh-pressure

SECOND DAY, TUESDAY JUNE 22 2004

Slab devolatilization: fluid budgets, nature and compositions of released fluids

Stefano Poli, Dipartimento Scienze della Terra, Milano, Italy
The budget of C-O-H components at subduction zones

Pascal Philippot, Laboratoire de Géosciences Marines, Institut de Physique du Globe de Paris
Fluid produced during HP and UHP metamorphism. Chemical and isotopic imprint

Zachary Sharp, Dept. of Earth and Planetary Sciences, University of New Mexico, Albuquerque, U.S.A.
An introduction to and applications of stable isotope geochemistry to high pressure rocks

Marco Scambelluri, Dipartimento per lo Studio del Territorio e delle sue Risorse, Genova, Italy
Fluid and element recycling in the subducted oceanic lithosphere

THIRD DAY, WEDNESDAY JUNE 23 2004.

Fluids in high and very high pressure rocks and mechanisms of fluid/rock element exchange

Maria Luce Frezzotti, Dipartimento Scienze della Terra, Siena, Italy
Fluids in UHP rocks: the fluid inclusion evidence

Joerg Hermann, Research School of Earth Sciences, The Australian National University, Canberra, Australia
Experimental and natural constraints on trace element recycling in subduction zones

Poster session

Fourth Day, Thursday June 24 2004

Natural High and Ultra high pressure rocks: Textures and mineralogy

Roberto Compagnoni, Dipartimento di Scienze Mineralogiche e Petrologiche, Torino, Italy
High and UHP rocks: occurrences and microstructures

Gaston Godard, Laboratoire de Géosciences Marines CNRS UMR 7097 – IPGP, Paris
Eclogite-facies poly-orogenic metapelites and metagranites: A case study from the Armorican massif (Variscan belt)

Hermann Von Roermund, Department of Earth Sciences, Utrecht University, Utrecht, The Netherlands
UHP minerals within garnet peridotites of the Western Gneiss Region, Norway.

Gisella Rebay, Dipartimento di Scienze della Terra, Pavia, Italy
PTX sections for high pressure rocks

Fifth Day, Friday June 25 2004

Natural high and ultra high pressure rocks: Pressure-temperature, time evolutions and exhumation processes

Daniela Rubatto, Department of Geology, Australian National University, Canberra, Australia
Geochronology of HP and UHP rocks and inferences on the rates of subduction and exhumation processes

Alexei Perchuk, Institute of Geology, Mineralogy and Geophysics, Ruhr-University, Bochum, Germany
Temporal aspects of HP rocks evolution: insight into exhumation process

FRIYAY JUNE 25. Afternoon End of the School