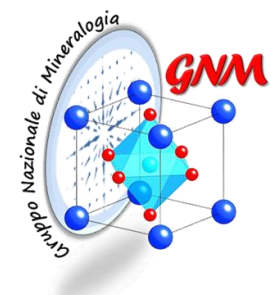


Physical properties of minerals: how and why to dive into their knowledge

***Second Announcement
and Registration***



***Bressanone, February 12-15, 2018
Casa della Gioventù, via Rio Bianco, 12
39042 Brixen – Bressanone***



***Mineralogical School of the
National Mineralogical Group (GNM)
and Italian Society of Mineralogy and
Petrology (SIMP)***



Physical properties of minerals: how and why to dive into their knowledge



The school is open to students of master degree programs, PhD students and young researchers from universities and research institutions, classified in the subject area of Earth Sciences, Material Sciences, Natural and Environmental Sciences, Chemistry and Physics.

The School will be focused on the physical properties of solid/crystalline materials - optical, thermodynamic, electrical, magnetic and mechanical - highlighting the relationships among those properties and the crystal structures, the size vs surface as well as the microstructure in them.

Types of materials - minerals, semiconductors, metals, glasses, orientationally disordered crystals, defective solids, and more - will be introduced and their main physical properties will be described.

These themes will be approached by a theoretical and analytical point of view and some applications/implications to geological and material science themes will be discussed.

The school is based on a number of lessons, which will be complemented by exercises, worked examples and learning self-assessment. Students will be continuously monitored by a selected and restricted panel of teachers, who are expected to attend the school all the time, and to provide an up-to-date and complete framework of knowledge and investigation methods on the selected topics.

Invited speakers

Matteo Ardit (University of Ferrara)

Omar Bartoli (University of Padova)

Fernando Cámara (University of Milano)

Paola Comodi (University of Perugia)

Francesco Di Benedetto (University of Firenze)

Maria Luce Frezzotti (University of Milano-Bicocca)

Gabriele Giuli (University of Camerino)

Annalisa Martucci (University of Ferrara)

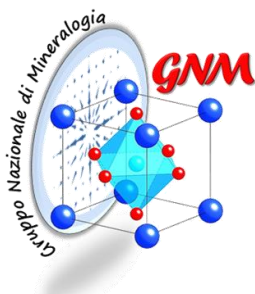
Enrico Mugnaioli (IIT-Pisa)

Marco Pasero (University of Pisa)

Gabriella Salviulo (University of Padova)

Luca Valentini (University of Padova)

Scientific and Organizing Committee



Paola Comodi (University of Perugia)
Annalisa Martucci (University of Ferrara)
Marco Pasero (University of Pisa)
Mauro Prencipe (University of Torino)
Gabriella Salviulo (University of Padova)





Venue

The school will take place in the following location:
Casa della Gioventù, via Rio Bianco, 12 - tel. 0472 271511.

All the participants will be accommodated at the Accademia Nikolaus Cusanus, Via Del Seminario, 2 - tel: 0472 832204.
No reservation will be guaranteed for registration later than November 20th.

Registration

Deadline for regular registration: **October 31th, 2017 € 250**
Late registration: **after October 31th, € 275**

The registration fee includes:

Accommodation at the Accademia Nikolaus Cusanus in double occupancy room (3 days), including breakfast
coffee breaks during the School days
Tuesday and Wednesday lunches
Wednesday dinner
Certificate Accreditation from the Organizing Committee

For any question, mail to: mrs@unife.it

Info: <http://www.socminpet.it/SIMP/GNM/>

Bank Account Information

c/c BancoPosta n. 000014317564

Account name "Società Italiana di Mineralogia e Petrologia"

IBAN: IT41L0760114000000014317564

reporting the following causal: Scuola GNM 2018 – Name and Surname

Participants are required to send the bank receipt copies to GNM via e-mail (mrs@unife.it), confirmation will be sent accordingly. Please deposit the total fees with your name and address and send completed registration and accommodation forms together to GNM with bank receipt copies.

PhD students Accreditation: 3 ECTS.

During the School, "Poster Prize" will be awarded to participants who have posted their poster concerning their research activity. The posters will be evaluated on different points, in particular:
Aesthetics, Scientific quality, Popularization, And originality.

Poster size: 70 cm (width) x 100 cm (height).

The posters presented at the school, as well as the lessons, will be published on Plinius.

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Monday, February 12th

15:00-16:45 – Gabriella Salviulo - Physical properties of minerals: past, present and future

16:45-17:15 – coffee break

17:15-19:00 – Gabriele Giuli – Electrochemical properties of minerals

Tuesday, February 13th

09:00-10:45 – Marco Pasero - Single crystal X-ray diffraction: a powerful analytical tool

10:45-11:15 – coffee break

11:15-13:00 – Enrico Mugnaioli - Electron crystallography: imaging and diffraction

13:00-14:30 – Lunch

14:30-16:15 – Maria Luce Frezzotti - Raman spectroscopy in Earth Sciences

16:15-16:45 – coffee break

16:45-18:30 – Francesco Di Benedetto - EPR spectroscopy and magnetometry of minerals:
insights to crystal chemistry

Wednesday, February 14th

09:00-10:45 – Paola Comodi - Elastic properties of minerals: theory and practice

10:45-11:15 – coffee break

11:15-13:00 – Fernando Cámara - Collecting high temperature single crystal diffraction data
on minerals and proxies: how and what for

13:00-14:30 – Lunch

14:30-16:15 – Annalisa Martucci - Micro and mesoporosity of inorganic materials:
ion exchange properties

16:15-16:45 – coffee break

16:45-18:30 – Omar Bartoli - A continent entrapped inside a mineral

20:00-22:00 – Social dinner

Thursday, February 15th

09:00-10:45 – Matteo Ardit - Long- vs. short-range properties along binary solid solutions: the interplay between
X-ray diffraction and absorption spectroscopies

10:45-11:15 – coffee break

11:15-13:00 – Luca Valentini - Industrial minerals in the spotlight: optimizing their environmental performance
for sustainable development