

# INSEGNACI ETNA 2023

## ANNUAL INTERNATIONAL WORKSHOP



IISS BENEDETTO RADICE  
BRONTE - OCTOBER, 20-22

## **Welcome to the 2023 edition of the Insegnaci Etna School! Benvenuti!**

This workshop brings together a number of schools from Eastern Sicily, one of the most fascinating areas in Europe for its culture and environment, and schools from various Euro-Mediterranean countries.

It aims to teach various aspects of geosciences directly in the field, not only about the nearby Etna volcano, but also about earthquakes, tsunamis, meteorology, geo-environment and the relationships between all these elements and the inhabitants of this area.

We are delighted with the work of EduMed, a newly created educational observatory supported by the University of the Côte d'Azur in Nice, France. Originally dedicated to seismology, this observatory and its European partners have extended the scope of their educational activities to all aspects of geosciences and geohazards in the Mediterranean. Etna was, of course, a perfect candidate for bringing European teachers and their classes into direct contact with various aspects of the geosciences.

This year, thanks to the financial support of the European Geoscience Union (EGU), twelve teachers have been invited from France, Estonia, Greece, Portugal, Romania, Turkey, Spain and the United Kingdom.

We hope that the workshop will encourage exchanges between local teachers and teachers from across Europe, and that it will continue with further exchanges of students and classes. The schools of the Etna region play a key role in this exchange, because these links are taking place and growing within their premises, on the slopes of Etna. We believe that this is an extraordinary opportunity for both Sicilian and European teachers.

On Friday afternoon and Saturday there will be scientific conferences on Etna's eruptions, active faults, earthquakes and ground deformation. There will be presentations by students from local schools on various topics: water, vegetation, the eruption that hit Bronte 180 years ago, the data collected by the didactic seismometers placed around Etna.

There will also be three laboratories where teachers can carry out various practical didactic activities on earthquakes, seismic data analysis, the "Sismobox" experiments, and satellite images analysis.

On Sunday there will be an excursion to the slopes of Etna above Bronte, with the support of the Bronte section of the Club Alpino Italiano. We will enjoy different aspects of the environment with magnificent landscapes, vegetation and outcrops!

It will then be the time for a Goodbye! and Arrivederci all'anno prossimo!, sempre più numerosi!

The Organizing Committee of Insegnaci Etna 2023



## ***Ringraziamenti /acknowledgements***

We would like to thank all the people and institutions that have contributed to the organisation of Insegnaci Etna 2019!

First of all, Maria Pia Calanna, Director, and all the teachers of IISS Benedetto Radice, whose warm welcome in their school was essential for the success of this field school! And let us not forget all the other staff of this school!

The European Geoscience Union (EGU), whose financial contribution made it possible for European teachers from outside Italy to participate, thus helping to establish contacts between teachers at European level.

The University of Catania, the University of Rome III, the Istituto Nazionale di Geofisica e Vulcanologia - Osservatorio Etneo, the Ecole Normale Supérieure de Paris for their overall contribution and the participation of high level international speakers.

The EDUMED Educational Observatory (University Côte d'Azur), whose contribution is not limited to this school, but extends throughout the year for discussions, support in the use of software and data, and the installation of new instruments in the field.

And we thank all the researchers and teachers who contributed to this educational workshop and their institutions!



**Programme**



## Friday 20 October 2023 - IISS Benedetto Radice, Bronte

### **15:00-15:15** Welcome and Introduction

- Maria-Pia Calanna, dirigente dell'IISS Benedetto Radice
- Jean-Luc Berenguer, EGU Education Committee & EDUMED

**15:15-16:00** Scuole / Schools : Students from InsegnaciEtna schools show the results they have achieved since the last seminar in various projects and activities / Studenti delle scuole della rete InsegnaciEtna mostrano risultati ottenuti in diversi progetti e attività dopo il precedente seminario

- Liceo scientifico Archimede Acireale : Analysis of the waters of some springs and rivers on the eastern slopes of Etna / Analisi delle acque di alcune sorgenti e fiumi del versante orientale etneo

- IIS Leonardo di Giarre: Pioneer plants in the Etnean area: although lava flows can destroy and alter the landscape, pioneer plants play a crucial role in restoring the biosphere / Le piante pioniere nel territorio Etneo: sebbene le colate di lava possano distruggere e modificare il paesaggio, le piante pioniere svolgono un ruolo cruciale nel ripristinare la biosfera

- I.C. Edmondo De Amicis à Randazzo : Geomorphological aspects between lava and sedimentary soils along the Alcantara river north of the town of Randazzo / Aspetti geomorfologici tra terreni lavici e sedimentari presenti lungo il fiume Alcantara a nord dell'abitato di Randazzo

**16:00-16:30** Francesca Cifelli, Università Roma III: Earthquakes and risks / Terremoti e rischi - in visioconferenza, zoom link: <https://univ-cotedazur.zoom.us/j/89763941204?pwd=ZytaOTVITlh0SktwbnBrTEoyMGIXUT09>

**16:30-17:00** Francesco Carnemolla, University of Catania, A look at some active faults in the catania suburbs / Uno sguardo ad alcune faglie attive nella suburbana catania

**17:00-17:30** Pierre Briole, École Normale Supérieure de Paris, What is a ground deformation model? / Cos'è un modello di deformazione del suolo?

## Saturday 21 October 2023 - IISS Benedetto Radice, Bronte

**09:00-09:15** Welcome to the second day of 'Insegnaci etna' - Zoom link : <https://univ-cotedazur.zoom.us/j/85321358037?pwd=VzNreCt2R3o0aFdqMzdnSzFNampsZz09>

**09:15-10:00** Scuole / Schools (continued)

- Liceo scientifico G. Galilei Catania: Earthquake location on Mt. Etna using Edumed data and Tectoglob software / Localizzazione dei terremoti che si verificano sull'Etna utilizzando i dati Edumed

- IISS Benedetto Radice Bronte: 180<sup>th</sup> anniversary of the 1843 lava flow that hit the city of Bronte / 180<sup>e</sup> anniversario della colata lavica del 1843 che colpì la città di Bronte

- 8th Junior High School in Chalandri , Greece: The Teen8ers come closer to Geosciences, a lifetime "Geo" experience for four students thanks to CRL School/EGU / Un'esperienza di vita "Geo" per quattro studenti grazie a CRL School/EGU

**10:00-10:30** Boris Behncke, INGV-OE Catania, Current activity of the Etna, recent eruptions, types of eruptions, beauty of volcanic activity / L'attività presente dell'Etna, eruzione recenti, tipi di eruzione, bellezza dell'attività vulcanica

*10:30 - 11:00* Coffee break

**11:00-18:30** Laboratorio di pratica / hands-on sessions: Three different activities at the IISS Benedetto Radice; working languages: English, Italian and French; each activity (Lab A, Lab B, Lab C) is presented three times, in order to divide the attending teachers in three groups of 12-13 people each; the duration of each activity is 2 hours / Tre diverse attività all'IISS Benedetto Radice; lingue di lavoro: Inglese, italiano e francese; ogni attività (Lab A, Lab B, Lab C) viene presentata tre volte, in modo da dividere i docenti presenti in tre gruppi di 12-13 persone ciascuno; la durata di ogni attività è di 2 ore

- **11:00 - 13:00** > Periodo 1 / Time Period 1
- *13:00 - 14:30* Lunch Break
- **14:30 - 16:30** > Periodo 2 / Time Period 2
- **16:30 - 18:30** > Periodo 3 / Time Period 3

#Lab A with EGU Field Officers' practical labs. (Giulia Realdon, Xavier Juan - EGU Field Officers): Mt Etna, practical labs on volcanoes and beyond, Earth Learning Ideas / Etna, laboratori pratici sui vulcani, vulcano in laboratorio

#Lab B with EDUMED Observatory (Anne von Hatten - Geography Teacher). Summer drought in the Mediterranean: satellite images, resources for an interdisciplinary approach of specific issues concerning the local territory in order to educating on the environment and sustainable development / Siccità estiva nel Mediterraneo: le immagini satellitari: risorse per un approccio interdisciplinare a tematiche specifiche del territorio locale per educare all'ambiente e allo di sviluppo sostenibile

#Lab C with EDUMED Observatory (Carole Larose/ JL Berenguer). Seismic data online for Etna area: how to analyze and interpret the data registered

by the pedagogical seismographs installed around the Etna in the Insegnaci Etna framework / Cosa c'è di nuovo nel 'Insegnaci Etna' sensors network ? Dati dell'Etna registrati dai sensori sismici della rete Insegnacietna & come analizzare e interpretare i dati registrati dai sismografi didattici installati intorno all'Etna nell'ambito di Insegnaci Etna?

### Sunday 22 October - Field trip

Escursione sul Etna with the section of Bronte of the Club Alpino Italiano



*Last update Thursday 19 October 2023*