



«ETTORE MAJORANA» FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE  
TO PAY A PERMANENT TRIBUTE TO ARCHIMEDES AND GALILEO GALILEI, FOUNDERS OF MODERN SCIENCE  
AND TO ENRICO FERMI, THE “ITALIAN NAVIGATOR”, FATHER OF THE WEAK FORCES



# EXTREME ENERGY EVENTS PROJECT

## *1st MEETING OF THE EEE PROJECT AFTER COVID SHUTDOWN*

**ERICE-SICILY: 17 – 19 NOVEMBER 2021**

**Sponsored by the:** • Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government  
• Italian National Institute of Nuclear Physics • Enrico Fermi Historical Museum of Physics and Research and Study Centre

### PROGRAMME AND LECTURERS

#### *Saluti alla Collaborazione EEE*

- L. CIFARELLI, Università e INFN Bologna, Italia

#### *Ecogas per le stazioni EEE: Rivelatori a gas*

- M. ABBRESCIA, INFN e Università di Bari, Italia

#### *Ecogas per le stazioni EEE: Analisi dati su miscele ecologiche*

- E. BOSSINI, Università e INFN Pisa, Italia

#### *La Tomografia Computerizzata con raggi X: un nuovo strumento per lo studio e la diagnostica del Patrimonio artistico e culturale*

- M.P. MORIGI, Università di Bologna, Italia

#### *Ecogas per le stazioni EEE: Hands-on session*

#### *Ecogas per le stazioni EEE: Finalizzazione del lavoro di analisi dati*

#### *La Parola alle Scuole: sessione 1*

- Liceo Michelangelo - Cagliari, Italia

Liceo Fermi - Paternò, Italia

Istituto Majorana - Lampedusa, Italia

Liceo Banzi Bazoli - Lecce, Italia

Liceo Scorza - Cosenza, Italia

I.S.S. Staffa - Trinitapoli, Italia

#### *PolarQUEEEst*

- O. PINAZZA, INFN Bologna, Italia

#### *La Parola alle Scuole: sessione 2*

Liceo Palmieri - Lecce, Italia

Liceo Da Procida - Salerno, Italia

Liceo Cagnazzi - Altamura, Italia

Liceo Pacinotti - Cagliari, Italia

Liceo Fardella - Trapani, Italia

#### *Coincidenze tra rivelatori distanti: dai contatori Geiger all'Osservatorio EEE*

- F. RIGGI, Università e INFN Catania, Italia

### PURPOSE OF THE MEETING

Purpose of this meeting, jointly organised by the Istituto Nazionale di Fisica Nucleare (INFN) and the Museo Storico della Fisica e Centro Studi e Ricerche “Enrico Fermi”, is to give the opportunity to the members of the EEE Collaboration and to the students and teachers of the high schools participating in the EEE Project, to meet again after the long shutdown due to the pandemic restrictions. The meeting is organised in a hybrid format and foresees the in-presence participation of about 20 scientists, plus 50 students and teachers, and of more than 250 people connected remotely. The programme includes talks on the basic principles of gaseous detectors, on cosmic rays, cosmic showers and the analysis of coincidences between distant EEE detectors (from hundreds of m up to hundreds of km apart, across the Italian territory), and on the PolarquEEEst mission to measure cosmic muons beyond the Arctic Polar Circle. Furthermore, since the EEE Project is actively committed in the ecological transition, a dedicated masterclass on “Ecogases for EEE stations – Data analysis on ecological mixtures” will be given to the students. Finally, for wide dissemination purposes, the topic of physics applied to the archaeological field, in particular in Sicily, will also be addressed.

### APPLICATIONS

Persons wishing to attend the Course are requested to write to the Director of the Meeting:

Prof.ssa Luisa CIFARELLI  
Università degli Studi di Bologna  
Via Irnerio 46 - 40126 Bologna, Italy  
email: [luisa.cifarelli@bo.infn.it](mailto:luisa.cifarelli@bo.infn.it)

### PLEASE NOTE

Participants must arrive in Erice no later than 12 a.m. on 17th November 2021.

### POETIC TOUCH

According to legend, Erice, son of Venus and Neptune, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. The founder of modern history — i.e. the recording of events in a methodic and chronological sequence as they really happened without reference to mythical causes — the great Thucydides (~500 B.C.), writing about events connected with the conquest of Troy (1183 B.C.) said: «*After the fall of Troy some Trojans on their escape from the Achaei arrived in Sicily by boat and as they settled near the border with the Sicanians all together they were named Elymi: their towns were Segesta and Erice.*»

This inspired Virgil to describe the arrival of the Trojan royal family in Erice and the burial of Anchises, by his son Aeneas, on the coast below Erice. Homer (~1000 B.C.), Theocritus (~300 B.C.), Polybius (~200 B.C.), Virgil (~50 B.C.), Horace (~20 B.C.), and others have celebrated this magnificent spot in Sicily in their poems. During seven centuries (XIII-XIX) the town of Erice was under the leadership of a local oligarchy, whose wisdom assured a long period of cultural development and economic prosperity which in turn gave rise to the many churches, monasteries and private palaces which you see today.

In Erice you can admire the Castle of Venus, the Cyclopean Walls (~800 B.C.) and the Gothic Cathedral (~1300 A.D.). Erice is at present a mixture of ancient and medieval architecture. Other masterpieces of ancient civilization are to be found in the neighbourhood: at Motya (Phoenician), Segesta (Elymian), and Selinunte (Greek). On the Aegadian Islands — theatre of the decisive naval battle of the first Punic War (264-241 B.C.) — suggestive neolithic and paleolithic vestiges are still visible: the grottoes of Favignana, the carvings and murals of Levanzo.

**More information about the «Ettore Majorana» Foundation and Centre for Scientific Culture can be found on the WWW at the following address:**

<http://www.csem.infn.it>