



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



ETTORE MAJORANA CENTENARY

INTERNATIONAL SCHOOL OF GEOPHYSICS

26th Workshop

EARTHQUAKE AND SHAKING PROBABILITIES: HELPING SOCIETY TO MAKE THE RIGHT CHOICE

ERICE-SICILY: 18 - 24 OCTOBER 2006

PROGRAMME AND LECTURERS

FIRST SECTION

- the raw ingredients of the elaboration of a comprehensive model of earthquake occurrence: historical, geological and modern strain data
- potential interactions among different types of data, known limitations and new constraints that can be obtained to reduce the lack of knowledge

SECOND SECTION

- current earthquake recurrence models and physical constraints on the seismic cycle
- assessment of earthquake probabilities that may result from different models of earthquake recurrence, their reliability, their value for enforcing risk mitigation policies at local or regional scale

THIRD SECTION

- present knowledge on strong ground motion
- arranging input data for use in SHA practice
- current approaches in probabilistic SHA at various scales and their mutual interactions

FOURTH SECTION

- comparison between the status of SHA in different countries in response to different requests from state authorities, the industry and the general public
- on-going and future developments in SHA methodologies and approaches

Convenors:

- D. GIARDINI, ETHZ, Zuerich, CH
- K. SHIMAZAKI, ERI, Tokyo, J
- M. STUCCHI, INGV, Milan, I
- G. VALENSISE, INGV, Rome, I
- R. WESSON, USGS, Denver, CO, USA

Lecturers:

- J. ADAMS, Geological Survey of Canada, Ottawa, CDN
- K. BERRYMAN, Institute of Geological and Nuclear Sciences, NZ
- R. BILHAM, University of Colorado, Boulder, CO, USA
- J. BOMMER, Imperial College, London, UK
- G. M. CALVI, EUCENTRE, Pavia, I
- M. COCCO, INGV, Rome, I
- E. FIELD, USGS, Pasadena, CA, USA
- D. HOLLNACK, Munich Reinsurance Company, München, D
- S. HOUGH, USGS, Pasadena, CA, USA
- D. JACKSON, UCLA, Los Angeles, CA, USA
- S. MIDORIKAWA, Tokyo Institute of Technology, Tokyo, J
- R. MUSSON, British Geological Survey, Edinburgh, UK
- K. OKUMURA, Hiroshima University, J
- M. ORDAZ SCHROEDER, UNAM, Mexico City, MX
- L. PERUZZA, INOGS, Trieste, I
- M. PETERSEN, USGS, Denver, CO, USA
- F. SCHERBAUM, Potsdam University, D
- R. STEIN, USGS, Menlo Park, CA, USA
- S. WARD, UCSC, Santa Cruz, CA, USA

PURPOSE OF THE WORKSHOP

The mitigation of seismic risk is based on obtaining new and more accurate insight on potentially destructive earthquakes and their shaking effects. Several recent scientific accomplishments in seismology, active tectonics and seismic hazard assessment (SHA) are leading to a better understanding of the seismic cycle and of the potential for destructive earthquakes. Modern societies, however, are increasingly faced with the need to bridge the gap between forefront research developments and the expectations by the authorities and the general public.

The Erice workshop aims at reviewing the state-of-the-art in the assessment of the probability for significant earthquakes and strong ground shaking, both from a time-dependent and a time-independent perspective. The workshop also intends to discuss forthcoming ideas and models and stimulate the interaction among scientists involved in similar efforts in different countries worldwide. The workshop is sponsored by the Italian Department for Civil Defense in the framework of a new agreement with INGV. Under this agreement INGV has planned five research projects involving the entire Italian seismic hazard community. The projects are aimed at obtaining new and more accurate insight on potentially destructive Italian earthquakes and their shaking effects.

The workshop is open to 80 participants, of which about 20 are invited speakers, and will include four full working days plus one day devoted to a field trip and to panel meetings.

APPLICATIONS

Persons wishing to attend the Workshop should apply in writing to:

- Dr. Gianluca VALENSISE
Istituto Nazionale di Geofisica e Vulcanologia
Via di Vigna Murata, 605 - 00143 ROMA, Italy
e-mail: Erice2006@ingv.it

Sponsored by

- Italian Ministry of Education, University and Scientific Research
- Sicilian Regional Government
- Italian Department for Civil Protection
- Italian National Institute for Geophysics and Volcanology

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 Anchise, by his son Enea, 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.

Splendid beaches are to be found at San Vito Lo Capo, Scopello, and Cornino, and a wild and rocky coast around Monte Cofano: all at less than one hour's drive from Erice.

More information about the «Ettore Majorana» Foundation and Centre for Scientific Culture can be found on the WWW at the following address:
<http://www.ccsem.infn.it>

- PLEASE NOTE

Participants must arrive in Erice on 18 October, not later than 10 pm.