

Ettore Majorana Foundation and Centre for Scientific Culture
International School of Bioelectromagnetics “Alessandro Chiabrera”

Director of the school: F. Bersani (University of Bologna,I)

The Centre for Scientific Culture in Erice (Sicily, Italy) is named after the great Italian scientist Ettore Majorana. Antonino Zichichi, the director of the Centre, has said: “At Erice, those who come in order to follow a certain School are called ‘students’, but actually they are young people who have successfully completed their University studies and who come to Erice in order to learn what the new problems are. However, what is distinctive for Erice is the spirit animating all participants: students no less than teachers. The prime objective is to learn. The student listens to the lectures and after the lunch break comes the most amusing part: the discussion session.”

Topics in Bioelectromagnetics have come to Erice many times in the past, especially in the 1980s, with international courses and workshops on non-ionising radiation, and today many participants of those courses contribute greatly to the development of this research field.

Following the request of the European Bioelectromagnetics Association (EBEA) and the Inter-University Centre for the study of the Interaction between Electromagnetic Fields and Biosystems (ICEmB), The Ettore Majorana Centre has established a Permanent School of Bioelectromagnetics, named after Alessandro Chiabrera, who is considered as a master by the young scientists of the two associations.

1st COURSE: “Methodology in Bioelectromagnetic Experimental Investigations”

Erice (Sicily, Italy): April 21-28, 2004

Directors of the Course:

Prof. Ferdinando Bersani
Department of Physics
Via Berti Pichat 6/2, Bologna (Italy)
Tel. +39 (0)51 209 5122
Fax +39 (0)51 209 5050

Bernard Veyret
Laboratoire PIOM CNRS /EPHE
Université de Bordeaux 1
ENSCP
Av Pey Berland
33607 Pessac cedex France
Phone/fax: +33 5 40 00 66 29

The first Course of the School will be devoted to the methodology needed in designing and performing experimental studies in Bioelectromagnetics. In view of the ongoing health risk assessment of electromagnetic field exposure, the quality of experimental investigations is of utmost importance. The main topics of the Course will be dosimetry and exposure systems, methods and problems of specific *in vivo* and *in vitro* studies, experimental planning and data analysis. All areas of interest will be covered in lectures, seminars and discussions where senior scientists will share with participants their own experience, and in a final round table organised by the leaders of the new European programme EMF-NET.

Diploma for the best poster presentation

The last day will be partially devoted to oral and poster presentations by participants. A diploma, named after “Alessandro Chiabrera”, will be awarded by a Scientific Committee to the author of the best poster.

Participation fee: 1200 € including food and lodging.

Application: Interested candidates should send an e-mail to the Directors of the Course at the following e-mail address: ebca-icembschool@icemb.org with the following information:

- A short Curriculum Vitae
- Scientific interest of the candidate
- For young Researchers: letter of recommendation of a Senior Scientist by e-mail (attached Word or PDF file)

In case of acceptance the candidate will be informed by e-mail.

The participation fee can be paid directly into the Bank Account of the Erice E. Majorana Centre indicating the motivation (Participation to the first Course of the International School of Bioelectromagnetics “Alessandro Chiabrera”) or directly to the School on arrival in Erice.

Bank Account: Banco di Sicilia, Erice

Bank Code for National participants (BBAN): T0102081850000410041482

Bank code for International participants (IBAN): IT40T0102081850000410041482

For details about the Ettore Majorana Centre: www.ccsem.infn.it

Please note: Participants must arrive in Erice on April 20, possibly not later than 6 p.m.

Programme

Arrival: April 20th ; Course: April 21st to April 27th (free day: April 25th); Departure: April 28th

Introduction to the course	F. Bersani & B. Veyret
Introduction to physics of RF	G. D’Inzeo (<i>University of Rome, I</i>)
RF exposure systems <i>in vitro</i>	N. Kuster (<i>ETH, Zurich, CH</i>)
RF exposure systems <i>in vivo</i>	N. Kuster (<i>ETH, Zurich, CH</i>)
RF experimental dosimetry	O. Gandhi (<i>University of Utah, USA</i>)
Introduction to physics of ELF	F. Bersani (<i>University of Bologna, I</i>)
ELF exposure systems <i>in vitro</i> and <i>in vivo</i>	G. Lovisolo (<i>ENEA, Rome, I</i>)
ELF experimental dosimetry	G. Lovisolo (<i>ENEA, Rome, I</i>)
Seminar: Microdosimetry	M. Liberti (<i>University of Rome, I</i>)
Experimental planning and statistical analysis	G. Le Pape (<i>University of Tours, F</i>)
Analysis of cellular functions	I. Lagroye (<i>University of Bordeaux, F</i>)
Cellular signalling	R. Luben (<i>University of California, USA</i>)
Genomics and proteomics	C. Maerker (<i>Heidelberg, D</i>)
Seminar: Thermal and non thermal effects	R. Glaser (<i>Von Humboldt Univ, Berlin, D</i>)
Genotoxic effects <i>in vitro</i>	M.R. Scarfi (<i>CNR, Naples, I</i>)
Genotoxic effects <i>in vivo</i>	Vijayalaxmi (<i>University of Texas, USA</i>)
Carcinogenesis <i>in vivo</i>	J. Juutilainen (<i>University of Kuopio, FIN</i>)
Cancer related, non genotoxic effects <i>in vitro</i>	I. Lagroye (<i>University of Bordeaux, F</i>)
Electrophysiological measurements <i>in vitro</i>	M. Mazzanti (<i>University of Rome, I</i>)
Behaviour and nervous system	R. De Seze (<i>INERIS, Paris, F</i>)
Gene expression	C. Ventura (<i>University of Bologna, I</i>)
Seminar: Research needs	M. Repacholi (<i>WHO, Geneve, CH</i>)
Oral presentations and posters of participants	
Round Table: Quality Assurance in Bioelectromagnetic Investigations	Organised by the EC FP6 Coordination action EMF-NET