

# «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



## SUMMARY OF THE 2012 COURSES – ERICE



All Courses are sponsored by the World Federation of Scientists (WFS), the Sicilian Regional Government (SRG), the Italian Ministry of Education, University and Scientific Research and the Galileo Galilei Foundation (GGF). Some of the Courses are under the sponsorship of the Italian Ministry of Foreign Affairs, the Italian Ministry of Health, the North Atlantic Treaty Organization (NATO), the American National Science Foundation (NSF), the Italian National Research Council (CNR), the Weizmann Institute of Science, the European Physical Society (EPS), the Italian National Institute for Nuclear Physics (INFN), the World Wildlife Fund (WWF), the Commission of the European Communities (CEC), some of the main Italian and foreign Universities and Research Centres, and the World Laboratory

- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D’ALESSANDRO»  
Directors: G.M. FARA – G. GIAMMANCO  
41<sup>st</sup> Course: *Emergencies in Public Health*  
Directors: S. CALDERALE – G.M. FARA – G.B. ORSI  
11 – 15 April 2012
- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS  
Directors: A.N. CHESTER – S. MARTELLUCCI  
51<sup>st</sup> Workshop: *Photoacoustic and Photothermal Phenomena. Focus on Biomedical and Nanoscale Imaging and NDE*  
Directors: R. LI VOTI – A. MANDELIS  
19 – 26 April 2012
- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES  
145<sup>th</sup> Course: *Geriatric Oncology, an update and future perspectives*  
Director: I. CARRECA  
27 – 29 April 2012
- INTERNATIONAL MEETING ON ALZHEIMER’S DISEASE: WHERE WE STAND AND WHERE WE GO  
Chairman: C. CARUSO  
2 – 6 May 2012
- INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION  
Director: B. MARAVIGLIA  
10<sup>th</sup> Course: *Brain Function Investigation by Magnetic Resonance, Electrophysiology, and Molecular Imaging*  
Directors: F. GIOVE – B. MARAVIGLIA  
6 – 13 May 2012
- INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»  
Director: F. GIANNESI  
58<sup>th</sup> Workshop: *Variational Analysis and Applications*  
Directors: N. FUSCO – A. MAUGERI – B.S. MORDUKHOVICH  
14 – 22 May 2012
- INTERNATIONAL SCHOOL OF GEOPHYSICS  
Director: E. BOSCHI  
38<sup>th</sup> Workshop: *Global Challenges for Seismological Data Analysis*  
Directors: M. COCCO – A. MICHELINI – T. VAN ECK – J.-P. VILOTTE  
25 – 30 May 2012
- INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY – Director: T.L. BLUNDELL  
45<sup>th</sup> Course: *Present and Future Methods for Biomolecular Crystallography*  
Directors: V.Y. LUNIN – R.J. READ – A. URZHUMTSEV  
31 May – 10 June 2012

- INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE  
Directors: O. JARDETZKY – J.D. PUGLISI  
11<sup>th</sup> Course: *Frontiers of Biophysics and Structural Biology*  
Directors: J.D. PUGLISI – E. VIANI  
11 – 21 June 2012
- INTERNATIONAL SCHOOL OF ETHOLOGY  
Directors: D. MAINARDI – S. PARMIGIANI  
28<sup>th</sup> Workshop: *The Evolution of Morality: the Biology and Philosophy of Human Conscience*  
Directors: F. DE WAAL – S. PARMIGIANI – T. PIEVANI  
17 – 22 June 2012
- INTERNATIONAL SCHOOL OF PHARMACOLOGY  
Director: G.P. VELO  
78<sup>th</sup> Workshop: *The Future of European Clinical Pharmacology*  
Directors: J.K. ARONSON – G.P. VELO  
18 – 22 June 2012
- INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS – Director: A. ZICHICHI  
50<sup>th</sup> Course: *What we would like LHC to give us*  
Directors: G. 't HOOFT – A. ZICHICHI  
23 June – 2 July 2012
- INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY  
Director: B. DI BARTOLO  
29<sup>th</sup> Workshop: *Fluorescence Spectroscopy 50 years after the appearance of the Judd-Ofelt Theory*  
Director: B. DI BARTOLO  
3 – 10 July 2012
- INTERNATIONAL SCHOOL OF COSMIC RAY ASTROPHYSICS «MAURICE M. SHAPIRO»  
18<sup>th</sup> Course: *A new era in Particle Astrophysics: New instruments, new results, new understanding*  
Directors: J.R. HÖRANDEL – T.S. STANEV – J.P. WEFEL  
4 – 10 July 2012
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS  
Director: G. BENEDEK  
55<sup>th</sup> Course: *Phase Separation and Superstripes in High Temperature Superconductors and Related Materials*  
Director: A. BIANCONI  
11 – 17 July 2012
- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS  
Directors: A.N. CHESTER – S. MARTELLUCCI  
52<sup>nd</sup> Course: *Advanced on Nanophotonics IV*  
Directors: M. BERTOLOTTI – F.A. BOVINO – C. SIBILIA  
17 – 29 July 2012
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS  
Director: G. BENEDEK  
56<sup>th</sup> Course: *Materials for Renewable Energy*  
Directors: D. GINLEY – J. POATE – E. RIMINI – A. SLAOUÏ – A. TERRASI  
18 – 28 July 2012
- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS  
Directors: P. HÄNGGI – F. MARCHESONI  
1<sup>st</sup> Course: *Energy Harvesting at Micro- and Nanoscales*  
Directors: L. GAMMAITONI – F. MARCHESONI – L. WORSCHICH  
24 – 29 July 2012
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS  
Director: G. BENEDEK  
57<sup>th</sup> Course: *Epioptics-12*  
Directors: A. CRICENTI – J. MCGUILP – T. RASING  
24 – 30 July 2012

- INTERNATIONAL SCHOOL ON MIND, BRAIN AND EDUCATION  
Directors: A.M. BATTRO – K.W. FISCHER  
7<sup>th</sup> Course: *Teaching: A new frontier of the Neurocognitive Sciences, Education and Culture*  
Directors: A.M. BATTRO – K.W. FISCHER – S. STRAUSS  
30 July – 4 August 2012
- INTERNATIONAL SCHOOL OF SCIENTIFIC JOURNALISM AND COMMUNICATION  
Director: E. IAROCCI  
3<sup>rd</sup> Course: *Nanotechnology*  
Director: E. IAROCCI  
31 July – 4 August 2012
- EXTREME ENERGY EVENTS – EEE PROJECT  
Director: A. ZICHICHI  
3<sup>rd</sup> Course: *Reports and Future Developments*  
5 – 10 August 2012
- ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI  
45<sup>th</sup> Session – Co-Chairman: T.D. LEE  
19 – 24 August 2012
- INTERNATIONAL SCHOOL OF LIQUID CRYSTALS  
Director: C. ZANNONI  
19<sup>th</sup> Course: *Italian-Brazilian Liquid Crystals*  
Directors: A. D’ALESSANDRO – L.R. EVANGELISTA – P. PASINI  
26 – 30 August 2012
- INTERNATIONAL SCHOOL OF ETHOLOGY  
Directors: D. MAINARDI – S. PARMIGIANI  
29<sup>th</sup> Workshop: *Mirror Neurons: New Frontiers 20 Years after their Discovery*  
Directors: P.F. FERRARI – G. RIZZOLATTI  
30 August – 7 September 2012
- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS  
Directors: A.N. CHESTER – S. MARTELLUCCI  
53<sup>rd</sup> Course: *Molecular Physics and Plasmas in Hypersonics - II*  
Director: M. CAPITELLI  
8 – 15 September 2012
- WORKSHOP OF THE JRC-IAEC STEERING COMMITTEE  
Chairman: R. CACIUFFO  
10 – 11 September 2012
- INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS  
Directors: A. FAESSLER - J. WAMBACH  
34<sup>th</sup> Course: *Probing the Extremes of Matter with Heavy Ions*  
Directors: A. FAESSLER – J. WAMBACH  
16 – 24 September 2012
- INTERNATIONAL SCHOOL OF GEOPHYSICS  
Director: E. BOSCHI  
39<sup>th</sup> Course: *Understanding Geological Systems for Geothermal Energy*  
Directors: F. QUATTROCCHI – A. MANZELLA  
25 September – 1 October 2012
- INTERNATIONAL SCHOOL OF CARDIOLOGY  
Director: F. FEDELE  
16<sup>th</sup> Course: *E-Cardiology Conference of Mediterranean*  
Director: F. FEDELE  
2 – 4 October 2012
- INTERNATIONAL SCHOOL OF IUS COMMUNE  
Directors: M. BELLOMO – O. CONDORELLI – K. PENNINGTON  
32<sup>nd</sup> Course: *The Legal Status of Jews and Muslims in the Ius Commune*  
Director: J. TOLAN  
5 – 11 October 2012

- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS  
Directors: P. HÄNGGI – F. MARCHESONI  
2<sup>nd</sup> Course: *The Physics of Small Artificial and Bio-Molecular Systems*  
Directors: P. JUNG – S. GROSS  
12 – 17 October 2012
- CONSULTA PERMANENTE DELLA SOCIETÀ ITALIANA DI CARDIOLOGIA  
3<sup>rd</sup> Course – Chairman: S. NOVO  
18 – 21 October 2012
- HIGHLY SPECIALIZED SEMINARS «EUGENE P. WIGNER»  
10<sup>th</sup> Seminar: *Meeting of the European Research Council*  
Director: H. NOWOTNY  
20 – 24 October 2012
- HIGHLY SPECIALIZED SEMINARS «EUGENE P. WIGNER»  
11<sup>th</sup> Seminar: *Earthquakes Early Warning from Space*  
Directors: R. BATTISTON – S. XUHUI  
21 – 24 October 2012
- INTERNATIONAL WORKSHOP ON TECHNOLOGY AND INNOVATION (EPS-TIG)  
1<sup>st</sup> Workshop: *Nuclear and Subnuclear Physics Technologies and Innovations Leading to Medical and Industrial Applications - highlights - review - evaluation - outlook*  
Chairman: H. WENNINGER  
21 – 25 October 2012
- ADVANCED WORKSHOP OF SPORTS MEDICINE «VINCENZO BAIAMONTE»  
6<sup>th</sup> Workshop: *Sport is Health*  
Director: F.P. SIELI  
25 – 29 October 2012
- INFN ELOISATRON PROJECT  
Director: A. ZICHICHI  
55<sup>th</sup> Course: *High Power Sources and Targets for Anti-Neutrino Production*  
Director: W.A. BARLETTA  
30 October – 5 November 2012
- INTERNATIONAL SCHOOL OF DERMATOLOGY  
Directors: G. BURG – B. GIANNOTTI  
6<sup>th</sup> Course: *Hot Spot in Plastic Dermatology*  
Director: L. ZICHICHI  
8 – 11 November 2012
- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D’ALESSANDRO»  
Directors: G.M. FARA – G. GIAMMANCO  
42<sup>nd</sup> Course: *Hygiene in Food and Dietary Habits: from Production to Consumption*  
Director: A. NASTASI  
11 – 15 November 2012
- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES  
146<sup>th</sup> Course: *Advances in Epileptology. From Basic Science to Clinical Approach*  
Director: O. DANIELE  
17 – 24 November 2012
- INTERNATIONAL SCHOOL ON BIOELECTROMAGNETISM «ALESSANDRO CHIABRERA»  
Director: F. BERSANI  
6<sup>th</sup> Course: *Static and Low Frequency Magnetic Fields: Physical Concepts, Biological Effects, Mechanisms and Limit Setting*  
Directors: J. JUUTILAINEN – F. PRATO  
25 November – 1 December 2012
- EXTREME ENERGY EVENTS – EEE PROJECT  
Director: A. ZICHICHI  
4<sup>th</sup> Course: *Detailed Reports and Perspective for Future Actions*  
2 – 12 December 2012

**More information about the activities of the Ettore Majorana Foundation  
can be found on the WWW at the following address:  
<http://www.ccsem.infn.it>**