

«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*



SUMMARY OF THE 2014 COURSES — ERICE



All Courses are sponsored by the World Federation of Scientists (WFS), the Sicilian Regional Government (ERS), 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
45th Course: *Infections by legionella: Surveillance, prevention and control*
Directors: P. BORELLA – G. GIAMMANCO
2 – 6 April 2014
- INTERNATIONAL SCHOOL OF PARTICLE ACCELERATORS
Director: E. WILSON
2nd Workshop: *Electromagnetic wake fields in particle accelerators*
Directors: E. MÉTRAL – V.G. VACCARO
23 – 29 April 2014
- INTERNATIONAL SCHOOL ON BIOELECTROMAGNETISM «ALESSANDRO CHIABRERA»
Director: F. BERSANI
7th Course: *Biological effects of combined exposures to EMF and other chemical and physical agents*
Directors: M.-O. MATTSSON – M.R. SCARFÌ
23 – 29 April 2014
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
Director: G. BENEDEK
60th Course: *Introduction to the theory and techniques of scattering and applications to Cultural Heritage*
Directors: I.S. ANDERSON – G. SALVATO – A. SCHERILLO
30 April – 9 May 2014
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
Director: G. BENEDEK
61st Workshop: *Bioelectronics: Principles, materials and processes*
Directors: D.N. BERATAN – D. CAHEN – P. FACCI – S.S. SKOURTIS
1 – 9 May 2014
- ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI
47th Session: *Energy, Cities and the control of complex systems*
WFS Energy PMP – Co-chairs: A.E. MOTTER – R. SCHOCK
10 – 16 May 2014
- INTERNATIONAL SCHOOL OF BIOPHYSICS «ANTONIO BORSELLINO»
42nd Course: *Biophysics of channels and transporters*
Directors: F. ASHCROFT – M. KAVANAUGH – M. PUSCH
11 – 17 May 2014
- INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION
Director: B. MARAVIGLIA
11st Course: *Brain function investigation by magnetic resonance and electrophysiology*
Directors: F. GIOVE – B. MARAVIGLIA
18 – 25 May 2014

- INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY
 Director: T.L. BLUNDELL
 47th Course: *Structural basis of pharmacology: Deeper understanding of drug discovery through crystallography*
 Directors: E. ARNOLD – R. PAUPTIT – V. SAMYGINA – R. STROUD
 30 May – 8 June 2014

- INTERNATIONAL SCHOOL OF SCIENTIFIC JOURNALISM AND COMMUNICATION
 Director: E. IAROCCI
 5th Course: *The digital world: Computing, networks and us*
 Directors: U. DOSSELLI – F. TURONE
 9 – 14 June 2014

- INTERNATIONAL SCHOOL OF ETHOLOGY AND INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES»
 Directors: D. MAINARDI – S. PARMIGIANI and P. FERRARI – G. RIZZOLATTI
 32nd and 1st Workshop: *Neuroeconomics: Recent advances and future directions*
 Directors: D. MAESTRIPIERI – C. PADOA-SCHIOPPA – A. RUSTICHINI
 15 – 20 June 2014

- INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS
 Director: A. ZICHICHI
 52nd Course: *Status of theoretical understanding and of experimental power for LHC physics and beyond*
 Directors: G. 't HOOFT – A. ZICHICHI
 24 June – 3 July 2014

- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS
 Directors: P. HÄNGGI – F. MARCHESONI
 3rd Course: *Single-file dynamics in physics and biology*
 Directors: O. FLOMENBOM – F. MARCHESONI – A. TALONI
 4 – 10 July 2014

- INTERNATIONAL SCHOOL OF COSMIC RAY ASTROPHYSICS «MAURICE M. SHAPIRO»
 19th Course: *Exploring the high energy universe*
 Directors: J.R. HÖRANDEL – T.S. STANEV – J.P. WEFEL
 4 – 11 July 2014

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
 Director: G. BENEDEK
 62nd Course: *Materials for renewable energy*
 Directors: D. CAHEN – D. GINLEY – J. POATE – A. SLAOUI – A. TERRASI
 11 – 19 July 2014

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
 Director: G. BENEDEK
 63rd Course: *Multi-condensates superconductivity*
 Directors: A. BIANCONI – C. SA DE MELO
 19 – 25 July 2014

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
 Director: G. BENEDEK
 64th Workshop: *Superstripes*
 Directors: G. BENEDEK – A. BIANCONI
 25 – 31 July 2014

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
 Director: G. BENEDEK
 65th Course: *Epioptics 12: Silicene*
 Directors: A. CRICENTI – D. NARDUCCI
 26 July – 1 August 2014

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
 Director: G. BENEDEK
 66th Workshop: *Indirect excitons*
 Directors: L. BUTOV – V. PELLEGRINI – A. PINCZUK – M. RONTANI
 26 July – 1 August 2014

- INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY
 Director: B. DI BARTOLO
 31st Workshop: *Complex phenomena in inorganic materials*
 Directors: B. DI BARTOLO – M. BETTINELLI
 30 July – 5 August 2014

- INTERNATIONAL SCHOOL ON MIND, BRAIN AND EDUCATION
 Directors: A.M. BATTRO – K.W. FISCHER
 9th Course: *Body, brain and the person*
 Directors: A.M. BATTRO – K.W. FISCHER – F. VIDAL
 30 July – 5 August 2014

- INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE
 Directors: O. JARDETZKY – J.D. PUGLISI
 13th Course: *The challenges of biophysics and structural biology*
 Director: J.D. PUGLISI
 31 July – 9 August 2014

- ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI
 48th Session – Co-Chairman: T.D. LEE
 18 – 25 August 2014

- INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY
 Director: B. DI BARTOLO
 32nd Workshop: *Photoionization and resonant X-ray scattering*
 Directors: L. AVALDI – B. DI BARTOLO
 26 August – 1 September 2014

- INTERNATIONAL SCHOOL OF LIQUID CRYSTALS
 Director: C. ZANNONI
 20th Course: *Liquid crystals for photonics*
 Directors: A. D'ALESSANDRO – P. PASINI
 2 – 7 September 2014

- INTERNATIONAL SCHOOL OF PHARMACOLOGY
 Director: G.P. VELO
 80th Course: *Eicosanoids*
 Directors: P. MINUZ – J. RITTER – D. SACERDOTI – M.L. SCHWARTZMAN – G.P. VELO
 2 – 7 September 2014

- INTERNATIONAL SCHOOL OF MATHEMATICS «G. STAMPACCHIA»
 Director: F. GIANNESI
 62nd Course: *Graph theory, algorithms and applications*
 Directors: R. CERULLI – A. GOLDBERG – G.F. ITALIANO – R.E. TARJAN
 8 – 16 September 2014

- INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS
 Directors: A. FAESSLER – J. WAMBACH
 36th Course: *Nuclei in the laboratory and in the cosmos*
 Directors: A. FAESSLER – J. WAMBACH
 16 – 24 September 2014

- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS
 Directors: P. HÄNGGI – F. MARCHESONI
 4th Course: *Energy finance*
 Directors: C. LUCHERONI – R. KIESEL
 24 – 29 September 2014

- INTERNATIONAL SCHOOL OF IUS COMMUNE
 Directors: M. BELLOMO – O. CONDORELLI – K. PENNINGTON
 34th Course: *Spanish and Italian Jurists and their work in the new world*
 Director: E. MONTANOS FERRÍN
 30 September – 4 October 2014

- INTERNATIONAL SCHOOL OF HEAVY IONS
Director: E. NAPPI
6th Course: *Protons in therapy and space*
Directors: R. BATTISTON – M. DURANTE
1 – 5 October 2014

- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS
Directors: A.N. CHESTER – S. MARTELLUCCI
55th Course: *Photoacoustic and photothermal phenomena. Focus on biomedical and nanoscale imaging*
Directors: R. LI VOTI – A. MANDELIS
5 – 12 October 2014

- INTERNATIONAL SCHOOL OF ETHOLOGY
Directors: D. MAINARDI – S. PARMIGIANI
33rd Course: *What made us humans: Biological and cultural evolution of Homo sapiens*
Directors: S. PARMIGIANI – T. PIEVANI – I. TATTERSALL
14 – 20 October 2014

- INFN ELOISATRON PROJECT
Director: A. ZICHICHI
57th Workshop: *High power cyclotrons for neutrino physics*
Director: W.A. BARLETTA
20 – 26 October 2014

- INTERNATIONAL SCHOOL OF DETECTOR TECHNOLOGY «TOM YPSILANTIS»
Director: C. WILLIAMS
3rd Workshop: *Technology and innovation (EPS-TIG)*
Chairman: H. WENNINGER
21 – 26 October 2014

- ADVANCED WORKSHOP OF SPORTS MEDICINE «VINCENZO BAIAMONTE»
8th Workshop: *Sport is life*
Director: F.P. SIELI
23 – 26 October 2014

- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
148th Workshop: *Advances in Oncogeriatry*
Director: I. CARRECA
30 October – 2 November 2014

- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS
Directors: A.N. CHESTER – S. MARTELLUCCI
56th Course: *RW propagation and technologies for Q/V band satellite systems*
Directors: A. MARTELLUCCI – C. RIVA
9 – 15 November 2014

- INTERNATIONAL SCHOOL OF DERMATOLOGY
Directors: G. BURG – B. GIANNOTTI
8th Course: *Topical treatment (therapy) in dermatology: The state of the art*
Directors: N. PIMPINELLI – L. ZICHICHI
13 – 16 November 2014

- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
149th Course: *Advances in orthopaedics*
Director: C. SUGAMELI
17 – 23 November 2014

- THE SCIENCE EUROPE MEDICAL SCIENCES COMMITTEE
Workshop on: *How to transform big data into better health?*
Chairman: R. FRACKOWIAK
23 – 26 November 2014

- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D’ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO
46th Course: *The vaccination policy in Italy: The unavoidable priorities*
Directors: F. BLANGIARDI – C. SIGNORELLI
24 – 27 November 2014

- INTERNATIONAL SCHOOL OF UROLOGY AND NEPHROLOGY
Directors: M. PAVONE-MACALUSO – V. PANSADORO – C. STERNBERG
15th Course: *Kidney cancer. Innovations in surgery and oncology*
Directors: L. BOCCON-GIBOD – V. PANSADORO – C. STERNBERG
28 November – 1 December 2014
- INTERDISCIPLINARY SEMINARS «EUGENE P. WIGNER»
9th Seminar: *Psychophysics and group psychodynamics*
Directors: F. CARMINATI – G. GALLI CARMINATI
29 November – 7 December 2014
- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
150th Course: *Neuroepidemiology: Methods and clinical applications*
Directors: M. D'AMELIO – W.A. ROCCA – G. SAVETTIERI
1 – 7 December 2014
- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
151st Course: *Advances in diabetes*
Directors: G. ALLOTTA – A. CERIELLO – O. SCHNELL
6 – 11 December 2014
- EXTREME ENERGY EVENTS – EEE PROJECT
Chairman: A. ZICHICHI
12 – 15 December 2014

**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>**