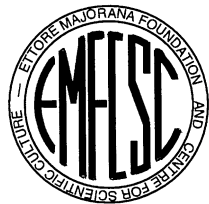


«ETTORE MAJORANA» FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE

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 2018 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 Enrico Fermi Historical Museum of Physics and Study and Research Centre, 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 NANOMEDICINE
Directors: M. FERRARI – M. MASSERINI
3rd Course: *Nanofluidics, nanoimaging and nanomanipulation*
Directors: G. CHIRICO – F. MANTEGAZZA
5 – 11 April 2018
- INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION
Director: B. MARAVIGLIA
13th Workshop: *Investigating brain function and structure by magnetic resonance and compatible approaches*
Directors: F. GIOVE – B. MARAVIGLIA
22 – 29 April 2018
- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS
Directors: A.N. CHESTER – D. WIERSMA
61st Course: *Cold plasma: Fundamentals and applications*
Directors: M. CAPITELLI – G. COLONNA – A. LARICCHIUTA
22 – 29 April 2018
- INFN ELOISATRON PROJECT
Director: A. ZICHICHI
60th Workshop: *High power cyclotrons for neutrino physics*
Director: W.A. BARLETTA
30 April – 4 May 2018
- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D'ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO
52nd Course: *Civil and criminal liability in the exercise of the profession of hygienist and of related health professions*
Directors: F. VITALE – I. MURA
2 – 6 May 2018
- INTERNATIONAL SCHOOL OF ETHOLOGY «DANILO MAINARDI»
Director: S. PARMIGIANI
41st Course: *Evolution and future of rituals, beliefs and religious minds*
Directors: J. HENRICH – A. NORENZAYAN – S. PARMIGIANI – E. SLINGERLAN
9 – 14 May 2018
- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D'ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO
53rd Course: *Adapted physical activity in sport, wellness and fitness: The role of Departments of Health and of the National Health Service in doping prevention and health promotion*
Directors: E. DI ROSA – V. ROMANO SPICA
15 – 19 May 2018

- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS
Directors: P. HÄNGGI – F. MARCHESONI
14th Course: *Exploring and quantifying rough free energy landscapes*
Directors: M. PARRINELLO – G.A. VOTH
15 – 20 May 2018
- INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES»
Directors: P.F. FERRARI – G. RIZZOLATTI
8th Course: *Understanding the neuroregulatory actions of oxytocin and its potential clinical applications*
Directors: J.-R. DUHAMEL – P.F. FERRARI – A. SIRIGU – L. YOUNG
22 – 27 May 2018
- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
Directors: A. ZICHICHI – I. CARRECA
155th Course: *The new era of laboratory medicine: From diagnosis to clinical management*
Director: M. CIACCIO
28 – 31 May 2018
- INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY
Director: T.L. BLUNDELL
51st Course: *Electron crystallography*
Directors: J. HADERMANN – L. PALATINUS – A. STEWART
1 – 10 June 2018
- INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY
Director: T.L. BLUNDELL
52nd Course: *Quantum crystallography*
Directors: P. MACCHI – D. JAYATILAKA
1 – 10 June 2018
- INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS
Director: A. ZICHICHI
56th Course
Directors: G. 't HOOFT – A. ZICHICHI
14 – 23 June 2018
- INTERNATIONAL SCHOOL OF SCIENTIFIC JOURNALISM AND COMMUNICATION
Director: E. IAROCCI
9th Course: *What's next: Challenges and opportunities for tomorrow's fundamental physics*
Directors: P. CAMPANA – C. DI GIORGIO
24 – 29 June 2018
- INTERNATIONAL SCHOOL OF MOLECULAR ONCOLOGY
Director: F.M. BUONAGURO
1st Course: *Human papillomavirus/HPV – related malignancies*
Directors: F.M. BUONAGURO – P.G. ROSSI – M.L. TORNESELLO
30 June – 4 July 2018
- INTERNATIONAL SCHOOL OF WATER AND WATER SYSTEM
Directors: R. CAR – F. MALLAMACE – L.G.M. PETTERSON
1st Course: *Water and the water systems – The hydrophobic effect*
Directors: R. CAR – F. MALLAMACE – L.G.M. PETTERSON
4 – 11 July 2018
- INTERNATIONAL SCHOOL OF NEUTRON SCIENCE AND INSTRUMENTATION
Directors: C. ANDREANI – R.M.G. CACIUFFO – R. MCGREEVY
5th Course: *Neutrons for chemistry and materials science applications*
Directors: P.F. HENRY – T. RAMIREZ CUESTA
4 – 13 July 2018
- INTERNATIONAL SCHOOL OF MATERIALS FOR SUSTAINABLE DEVELOPMENT AND ENERGY
Director: A. TERRASI
1st Course: *Materials for renewable energy and sustainability*
Directors: D. CAHEN – D. GINLEY – A. SLAUOI – A. TERRASI – A. WEIDENKAFF
6 – 13 July 2018

- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
Director: G. BENEDEK
73rd Course: *Frontiers of photonics, plasmonics and electronics with 2D nanosystems*
Directors: F. CAPASSO – G. SCAMARCIO – M.S. VITIELLO
14 – 20 July 2018
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
Director: G. BENEDEK
74th Workshop: *Epioptics and silicene*
Directors: A. CRICENTI – D. NARDUCCI
14 – 20 July 2018
- INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS
Director: G. BENEDEK
75th Workshop: *Majorana fermions and topological insulators*
Directors: A. BIANCONI – Y. MAENO
21 – 27 July 2018
- INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY
Director: B. DI BARTOLO
36th Workshop: *New developments in advanced luminescence materials*
Directors: M. BETTINELLI – J. COLLINS
25 – 31 July 2018
- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS
Directors: P. HÄNGGI – F. MARCHESONI
15th Course: *New trends in nonequilibrium statistical mechanics: Classical and quantum systems*
Directors: A.A. DUBKOV – B. SPAGNOLO – D. VALENTI
25 – 31 July 2018
- INTERNATIONAL SCHOOL OF COSMIC RAY ASTROPHYSICS «MAURICE M. SHAPIRO»
21st Course: *Astroparticle physics: Yesterday, today, and tomorrow*
Directors: J.R. HORANDEL – T.S. STANEV – J.P. WEFEL
1 – 7 August 2018
- INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE
Director: J.D. PUGLISI
16th Course: *Frontiers in biophysics and structural biology*
Directors: J.D. PUGLISI – E. VIANI PUGLISI
1 – 8 August 2018
- INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES
Chairman: A. ZICHICHI
51st Session – Co-Chairman: T.D. LEE
18 – 26 August 2018
- INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»
Directors: F. GIANNESI – M. THÉRA
69th Workshop: *Variational analysis and applications*
Directors: H. ATTOUCH – G. BUTTAZZO – P. DANIELE – A. MAUGERI
28 August – 5 September 2018
- INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»
Directors: F. GIANNESI – M. THÉRA
70th Workshop: *Mathematical and computational epidemiology of infectious diseases – Mathematically shaping global and local public health policies*
Directors: P. CERRAI – N. CHITNIS – A. D'ONOFRIO – P. MANFREDI
28 August – 5 September 2018
- INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS
Directors: A.N. CHESTER – D. WIERSMA
62nd Course: *Progress in photoacoustic and photothermal phenomena: Focus on biomedical and nanoscale imaging and NDE*
Directors: R. LI VOTI – A. MANDELIS
6 – 12 September 2018

- INTERNATIONAL SCHOOL OF PHARMACOLOGY «GIAMPAOLO VELO»
 Director: P. MINUZ
 86th Workshop: *The Italian pharmacovigilance system in the international context: Critical issues and perspectives*
 Directors: A. CAPUANO – R. LEONE – M. LINDQVIST – A. MARRA – U. MORETTI – G. TRIFIRÒ
 9 – 12 September 2018

- INTERNATIONAL SCHOOL OF CARDIOLOGY
 Directors: A. BRANZI – F. FEDELE
 20th Workshop: *Heart failure: From bench to bedside and beyond*
 Directors: F. FEDELE – S. NOVO
 13 – 15 September 2018

- INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS
 Directors: M. BUBALLA – A. FAESSLER – J. WAMBACH
 40th Course: *Strong interactions: From quarks and gluons to nuclei and stars*
 Directors: M. BUBALLA – A. FAESSLER – J. WAMBACH
 16 – 24 September 2018

- INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES» AND INTERNATIONAL SCHOOL OF ETHOLOGY «DANILO MAINARDI»
 Directors: P.F. FERRARI – G. RIZZOLATTI and S. PARMIGIANI
 9th Course and 42nd Course: *Epigenetics in cognition, developmental and evolutionary perspectives*
 Directors: P.F. FERRARI – A. IRIKI – S. PARMIGIANI – S.J. SUOMI – A. TRAMACERE
 25 – 30 September 2018

- INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS
 Directors: P. HÄNGGI – F. MARCHESONI
 16th Course: *The statistical physics of active matter*
 Directors: M.C. MARCHETTI – H. CHATÉ – G. GOMPPER
 1 – 6 October 2018

- INTERNATIONAL SCHOOL OF LIQUID CRYSTALS
 Director: C. ZANNONI
 24th Course: *Extended model of organic semiconductors*
 Directors: P. PASINI – A. WALKER – C. ZANNONI
 1 – 7 October 2018

- INTERNATIONAL SCHOOL OF LIQUID CRYSTALS
 Director: C. ZANNONI
 25th Workshop: *A scientific journey in the world of liquid crystals and beyond*
 Directors: A. ARCIONI – C. CHICCOLI – P. PASINI
 7 – 10 October 2018

- INTERNATIONAL SCHOOL OF IUS COMMUNE
 Directors: M. BELLOMO – O. CONDORELLI – K. PENNINGTON
 38th Course: *Ius, lex, and law: The foundations and definitions of a distinction in the medieval and modern world*
 Directors: O. CONDORELLI – A. WIJFFELS
 12 – 16 October 2018

- INTERNATIONAL SCHOOL ON MIND, BRAIN AND EDUCATION
 Directors: A.M. BATTRO – K.W. FISCHER
 13rd Course: *Immigration, refugees and education*
 Directors: A.M. BATTRO – S. LIPINA – M. SUÁREZ OROZCO
 15 – 21 October 2018

- ADVANCED WORKSHOP OF SPORTS MEDICINE «VINCENZO BAIAMONTE»
 11st Workshop: *Sport and lifestyle for a healthy body*
 Director: F.P. SIELI
 18 – 21 October 2018

- INTERNATIONAL SCHOOL ON ENVIRONMENT, CONFLICTS AND MIGRATION
 Directors: S. ATRAN – A. CONTIN – M. DIOP – G. MASTROJENI – S. PARMIGIANI – F.S. VOM SAAL
 1st Course: *Environment, conflicts and migration*
 Directors: S. ATRAN – A. CONTIN – M. DIOP – G. MASTROJENI – F.S. VOM SAAL
 21 – 26 October 2018

- INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
Directors: A. ZICHICHI – I. CARRECA
156th Course: *Adults and geriatrics cancer people: New tools for safe and efficient management*
Directors: A. GIORDANO – J. ROLFO – A. RUSSO
27 – 30 October 2018

- INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D'ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO
54th Course: *The impact of evaluation on health services organization and on their outcomes*
Directors: C. CISLAGHI – F. DI STANISLAO
18 – 23 November 2018

- INTERNATIONAL SCHOOL OF DERMATOLOGY
Directors: G. BURG – B. GIANNOTTI
11th Course: *Topographic dermatology*
Directors: N. PIMPINELLI – L. ZICHICHI
22 – 24 November 2018

- INTERNATIONAL SCHOOL OF ETHOLOGY «DANILO MAINARDI»
Director: S. PARMIGIANI
43rd Course: *Where science meets society: Citizen science as an emerging tool to expand research horizons*
Directors: C. CASTRACANI – A. SFORZI – D. SLAWSON
26 November – 1 December 2018

- INTERNATIONAL SCHOOL OF BRAIN CELLS AND CIRCUITS «CAMILLO GOLGI»
Directors: E. D'ANGELO – C. GANDINI WHEELER-KINGSHOTT
4th Course: *The sensorymotor system from cellular microcircuits to large-scale networks*
Directors: E. D'ANGELO – C. GANDINI WHEELER-KINGSHOTT – S. GRILLNER
3 – 15 December 2018

**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>**