«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 2016 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

• CONFERENCE FINANCIAL STATEMENTS: THE TRANSPOSITION OF DIRECTIVE 2013/14 TROUGH THE D. LGS N. 139/2015

Chairman: G. VIVIANO 30 March 2016

INTERNATIONAL SCHOOL OF NEUTRON SCIENCE AND INSTRUMENTATION

Directors: I.S. ANDERSON - C. ANDREANI - R.G.M. CACIUFFO

2nd Course: Designing and building a neutron instrument

Directors: K. ANDERSEN - K. HERWIG

31 March – 9 April 2016

• INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D'ALESSANDRO»

Directors: G.M. FARA - G. GIAMMANCO

48th Course: *Two-ways communication in the field of vaccination* Directors: L.R. BIASIO – G. CORSELLO – C. SIGNORELLI 5 – 9 April 2016

• INTERNATIONAL SCHOOL ON BIOELECTROMAGNETISM «ALESSANDRO CHIABRERA»

Director: F. BERSANI

8th Course: Electromagnetic fields and nervous system: Biological effects, biophysical mechanisms, methods and

medical applications

Directors: V. DI LAZZARO - B. VEYRET

10 – 17 April 2016

INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

151st Course: *Diabetes and its complications* Directors: G. ALLOTTA – A. CERIELLO 11 – 14 April 2016

• INTERNATIONAL SCHOOL OF BIOPHYSICS «ANTONIO BORSELLINO»

43rd Course: Nanoscale biophysics: Focus on methods and techniques

Directors: P. BIANCHINI – A. DIASPRO

17 – 24 April 2016

• INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION

Director: B. MARAVIGLIA

12nd Workshop: Investigating brain function and structure by advanced magnetic resonance approaches

Directors: F. GIOVE – B. MARAVIGLIA

30 April – 6 May 2016

INTERNATIONAL SCHOOL OF PHARMACOLOGY

Director: G.P. VELO

83rd Workshop: *Medication errors*

Directors: J.K. ARONSON - P. MINUZ - G.P. VELO

2 - 6 May 2016

• CONFERENCE DIRECT TAX RETURN 2016: NEWS AND CRITICAL ISSUES

Chairman: G. VIVIANO

6 May 2016

INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE

Director: J.D. PUGLISI

14th Course: *The challenges of biophysics and structural biology*

Directors: J.D. PUGLISI – E. VIANI PUGLISI

7 - 17 May 2016

INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS

Directors: P. HÄNGGI – F. MARCHESONI

7th Course: Quantum thermodynamics

Directors: M. CAMPISI – R. FAZIO – P. HÄNGGI

8 - 14 May 2016

INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES» – INTERNATIONAL SCHOOL OF ETHOLOGY

Directors: P.F. FERRARI - G. RIZZOLATTI - D. MAINARDI - S. PARMIGIANI

2nd and 38th Course: Animal and human emotions

Directors: F. DE WAAL - P.F. FERRARI

17 - 22 May 2016

INTERNATIONAL SCHOOL ON TRENDS IN FREE ELECTRON LASER PHYSICS

Directors: W.A. BARLETTA - R. BONIFACIO - M. FERRARIO

17 – 23 May 2016

INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY

Director: T.L. BLUNDELL

49th Course: High-pressure crystallography: Status artis and emerging opportunities

Directors: F.P.A. FABBIANI – M. GUTHRIE – J.B. PARISE

27 May - 5 June 2016

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

68th Workshop: The free electron laser for ultrafast imaging and spectroscopy at the nanoscale

Directors: G. ONIDA - G. ROSSI

5 - 11 June 2016

INTERNATIONAL SCHOOL OF NANOMEDICINE

Directors: M. FERRARI - M. MASSERINI

1st Course: Design and development of advanced nanomedicines to overcome biological barriers and to treat severe diseases

Directors: G. BENEDEK - M. MASSERINI

6 - 10 June 2016

• INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

Director: A. ZICHICHI

54th Course: *The new physics frontiers in the LHC–2 era* Directors: G. 't HOOFT – A. ZICHICHI

14 – 23 June 2016

INTERNATIONAL SCHOOL OF CARDIOLOGY

Directors: A. BRANZI - F. FEDELE

17th Workshop: *Echocardiology and cardiac imaging*

Director: S. NOVO 25 - 27 June 2016

INTERNATIONAL SCHOOL OF SCIENTIFIC JOURNALISM AND COMMUNICATION

Director: E. IAROCCI

7th Course: Fundamental science: From cutting-edge technologies to the heart of society

Directors: P. CAMPANA - F. TURONE

25 - 30 June 2016

INTERNATIONAL SCHOOL OF MATHEMATICS «G. STAMPACCHIA»

Director: F. GIANNESSI

66th Workshop: Advances in convex analysis and optimization

Directors: A. BARBAGALLO – H. FRÁNKOWSKA – G. MOSCARIELLO

5 – 12 July 2016

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

69th Course: *Materials for energy and sustainability*

Directors: D. CAHEN - L. CIFÁRELLI - D. GINLEY - A. SLAOUI - A. TERRASI - F. WAGNER

12 - 20 July 2016

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

70th Workshop: *TeraHz physics*

Directors: G. SCAMARCIO – M.S. VITIELLO

16 - 23 July 2016

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

71st Workshop: Delocalized electrons in atomic and molecular nanoclusters

Directors: K. HANSEN – V.V. KRESIN

22 - 28 July 2016

INTERNATIONAL SCHOOL OF NEUTRON SCIENCE AND INSTRUMENTATION

Directors: I.S. ANDERSON - C. ANDREANI - R.G.M. CACIUFFO

3rd Course: Water and the water systems Directors: R. CAR - F. MALLAMACE

22 - 31 July 2016

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK 72nd Workshop: *Epioptics* Director: A. CRICENTI 24 - 30 July 2016

INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS

Directors: P. HÄNGGI – F. MARCHESONI

8th Course: *Quantum interfaces with nano-optomechanical devices* Directors: K. LEHNERT – D. VITALI

31 July - 5 August 2016

INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY

Director: B. DI BARTOLO

34th Workshop: Advances in luminescence research

Director: B. DI BARTOLO

1 – 7 August 2016

INTERNATIONAL SCHOOL OF COSMIC RAY ASTROPHYSICS «MAURICE M. SHAPIRO»

20th Course: Particle, gamma-ray and neutrino astrophysics in the 21st Century

Directors: J.R. HÖRANDEL – T.S. STANEV – J.P. WEFEL

1 – 7 August 2016

• INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES - Chairman: A. ZICHICHI

49th Session - Co-Chairman: T.D. LEE

19 - 24 August 2016

INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

Director: A. ZICHICHI

Special Seminar: Unexpected results from AMS

Chair: S.C.C. TING – A. ZICHICHI

25 – 31 August 2016

INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES»

Directors: P.F. FERRARI - G. RIZZOLATTI

3rd Course: Early experiences and sensitive periods in developments Directors: P.F. FERRARI – N. FOX – C. NELSON – C. ZEÂNAH

31 August – 5 September 2016

INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS

Directors: P. HÄNGGI – F. MARCHESONI 9th Course: GEM – green energy management Directors: C. LUCHERONI – Š. STEFANI 2 – 13 September 2016

• INTERNATIONAL SCHOOL ON MIND, BRAIN AND EDUCATION

Directors: A.M. BATTRO - K.W. FISCHER 11th Course: Brain to brain communication Directors: A.M. BATTRO - U. HASSON

7 – 13 September 2016

INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS

Directors: M. BUBALLA - A. FAESSLER - J. WAMBACH

38th Course: Nuclear matter under extreme conditions – relativistic heavy-ion collisions

Directors: M. BUBALLA - A. FAESSLER - J. WAMBACH

16 – 24 September 2016

INTERNATIONAL SCHOOL OF PHARMACOLOGY

Director: G.P. VELO

84th Workshop: Pharmacovigilance 3.0: Do we need a new Erice declaration?

Directors: R. EDWARDS – R. LEONE – H. LE LOUET – U. MORETTI – G.P. VELO

25 September – 1 October 2016

INTERNATIONAL SCHOOL OF LIQUID CRYSTALS

Director: C. ZANNONI

22nd Course: Photonic integration: Advanced materials, new technologies and applications

Directors: P. PASINI - D. SELLERI - C. ZANNONI

25 September – 1 October 2016

• INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES»

Directors: P.F. FERRARI - G. RIZZOLATTI

4th Course: *Genomic imprinting, epigenetics and physiological functions*Directors: A. FERGUSON-SMITH – G. KELSEY – A. ISLES – V. TUCCI

2 - 7 October 2016

INTERNATIONAL SCHOOL OF STATISTICAL PHYSICS

Directors: P. HÄNGGI – F. MARCHESONI

10th Course: Exploring and quantifying rough free energy landscapes

Directors: M. PARRINELLO – G.A. VOTH

7 - 12 October 2016

INTERNATIONAL SCHOOL OF IUS COMMUNE

Directors: M. BELLOMO - O. CONDORELLI - K. PENNINGTON

36th Course: Repression and tolerance in Medieval and Modern Europe

Directors: M. BELLOMO - O. CONDORELLI

7 – 12 October 2016

INTERNATIONAL SCHOOL OF ETHOLOGY

Directors: D. MAINARDI - S. PARMIGIANI

39th Workshop: *The symbolic animal: Evolution and neuroethology of aesthetic*

Directors: L. FUSANI – V. GALLESE

15 - 19 October 2016

• INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS

Directors: A.N. CHESTER - S. MARTELLUCCI

57th Course: Photoacoustic and photothermal phenomena focus on biomedical and nanoscale imaging and NDE

Directors: R. LI VOTI - A. MANDELIS

19 - 26 October 2016

• INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS

Directors: A.N. CHESTER - S. MARTELLUCCI

58th Course: Instruments and techniques for satellite propagation campaigns – WS on Alphasat Aldo Paraboni O/V band experiment

Directors: L. CASTANET – L. LUINI – A. MARTELLUCCI

19 - 26 October 2016

ADVANCED WORKSHOP OF SPORTS MEDICINE «VINCENZO BAIAMONTE»

10th Workshop: Ageing well with sports

Director: F.P. SIELI 27 – 29 October 2016

INFN ELOISATRON PROJECT

Director: A. ZICHICHI

59th Workshop: High power cyclotrons for neutrino physics

Director: W.A. BARLETTA 28 October – 2 November 2016

INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

152nd Course: Pancare European network of survivors after childhood cancer

Directors: R. HAUPT - L. HJORTH - L. MASSIMO - M. JANKOVIC

31 October – 3 November 2016

 INTERNATIONAL SCHOOL OF NEUROSCIENCES «SIR JOHN ECCLES» – INTERNATIONAL SCHOOL OF ETHOLOGY

Directors: P.F. FERRARI - G. RIZZOLATTI - D. MAINARDI - S. PARMIGIANI

5th and 40th Course: Translational neuroscience and mental disorders: Bridging the gap between animals models and human condition

Directors: C. BLANCHARD - P.F. BRAIN - S. PARMIGIANI - J. RODGERS

4 – 9 November 2016

INTERNATIONAL SCHOOL OF DERMATOLOGY

Directors: G. BURG - B. GIANNOTTI

10th Course: Skin cancer: Standards and hits for the best practice

Directors: N. PIMPINELLI - L. ZICHICHI

10 – 13 November 2016

INTERNATIONAL SCHOOL OF CARDIOLOGY

Directors: A. BRANZI – F. FEDELE 18th Course: *Update in echocardiography*

Director: F. FÉDELE 14 – 19 November 2016

INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

153rd Course: Geriatric oncology and rare tumours

Director: I. CARRECA 20 – 24 November 2016

INTERNATIONAL SCHOOL OF UROLOGY AND NEPHROLOGY

Director: C. PAVONE

17th Course: Flexible ureteroscopy and lower tract endourology

Directors: L. DEFIDIO – A. PATEL – C. PAVONE

27 – 30 November 2016

INTERNATIONAL SCHOOL OF BRAIN CELLS AND CIRCUITS «CAMILLO GOLGI»

Directors: E. D'ANGELO - C. GANDINI WHEELER-KINGSHOTT

2nd Course: The cerebellum inside-out: Cells, circuits and functions

Directors: E. D'ANGELO - C. DE ZEEUW - C. GANDINI WHEELER-KINGSHOTT

1 – 5 December 2016

INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

154th Course: *Neonatology*

Directors: G. CORSELLO - D. LO CASCIO

3 December 2016

INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «GIUSEPPE D'ALESSANDRO»

Directors: G.M. FARA - G. GIAMMANCO

49th Course: Epidemiology for planning, implementation and evaluation in public health

Directors: F. DONATO – G. GIAMMANCO

3 – 7 December 2016

INTERNATIONAL SCHOOL OF CARDIOLOGY

Directors: A. BRANZI – F. FEDELE 19th Workshop: *Heart and lung interactions*

Director: S. NOVO 8 – 10 December 2016

• INTERNATIONAL SCHOOL OF GERONTOLOGY AND GERIATRICS «GIUSEPPE BARBAGALLO-

SANGIORGI»

12th Course: *Geriatrics* Director: M. BARBAGALLO

8 – 11 December 2016

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