«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 2011 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

 SCHOOL ON PARTICLE ACCELERATORS ON SYNCHROTRON RADIATION AND FREE ELECTRON LASERS Directors: R. BAILEY – W.A. BARLETTA 6 – 15 April 2011

INTERNATIONAL WORKSHOP ON DATA ANALYSIS IN ASTRONOMY «LIVIO SCARSI AND VITO DI GESÙ»

7th Course: *Science: Image in action* Director: B. ZAVIDOVIQUE

15 - 22 April 2011

INTERNATIONAL SCHOOL OF UROLOGY AND NEPHROLOGY

Director: M. PAVONE-MACALUSO

13th Course: Advanced course in Urological Oncology "focus on renal cancer"

Directors: G. CONTI - G. SICA

27 April – 1 May 2011

INTERNATIONAL SCHOOL OF CARDIOLOGY

Director: F. FEDELE

15th Course: *Latest finds in hypertension schemes*

Director: F. FEDELE 2 – 5 May 2011

INTERNATIONAL SCHOOL OF BIOPHYSICS «ANTONIO BORSELLINO»

41st Course: *Channels and transporters*Directors: L.J. DE FELICE – B. KANNER

10 – 18 May 2011

• INTERNATIONAL SCHOOL ON HADRONTHERAPY «EDWIN McMILLAN»

2nd Workshop: *Hadron beam therapy of cancer* Directors: A.M. SESSLER – V.G. VACCARO 20 – 27 May 2011

20 – 27 May 2011

INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION

Director: B. MARAVIGLIA

9th Course: Brain function investigation by magnetic resonance, electrophysiology, and molecular imaging

Directors: F. GIOVE - B. MARAVIGLIA

25 May – 1 June 2011

• INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY

Director: T.L. BLUNDELL

43rd Course: Electron crystallography: New methods to explore structure and properties of the nano world

Directors: A. AVILOV - U. KOLB - L. MESHI

2 – 12 June 2011

INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY

Director: T.L. BLUNDELL

44th Course: *The power of powder diffraction* Directors: W.I.F. DAVID – K. SHANKLAND

2 – 12 June 2011

• INTERNATIONAL SCHOOL OF CARDIAC SURGERY

Director: U.F. TESLER

4th Course: Reconstructive cardiovascular surgery: An interactive approach

Directors: U.F. TESLER - M.I. TURINA

13 - 18 June 2011

• INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

143rd Course: Recent advances in perinatal medicine

Directors: R. DI IORIO - D. GAZZOLO - E. MARINORI

16 – 19 June 2011

INTERNATIONAL SCHOOL OF PHARMACOLOGY

Director: G.P. VELO

76th Workshop: Innovation in health care technology: Drugs, surgery, devices and diagnostics

Directors: J.K. ARONSON - G. RECCHIA - P. RIZZINI - G.P. VELO

15 – 18 June 2011

INTERNATIONAL SCHOOL OF PHARMACOLOGY

Director: G.P. VELO

77th Workshop: *Eicosanoids in cardiovascular disease*

Directors: P. MINUZ - J. RITTER - D. SACERDOTI - J. G.P. VELO

19 – 23 June 2011

• INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

Director: A. ZICHICHI

49th Course: Searching for the unexpected at LHC and status of our knowledge

Directors: G. 't HOOFT – A. ZICHICHI

24 June – 3 July 2011

24 June – 3 July 2011

INFN ELOISATRON PROJECT

Director: A. ZICHICHI

53rd Course

24 June – 3 July 2011

• INTERNATIONAL SCHOOL OF LIQUID CRYSTALS

Director: C. ZANNONI

18th Course: Liquid crystal nanostructures and self-assembling: From organic electronics to metamaterials

Directors: A. D'ALESSANDRO - P. PASINI - C. ZANNONI

3 – 10 July 2011

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INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY

Director: B. DI BARTOLO 28th Course: *Nanophotonics* Director: B. DI BARTOLO

3 - 18 July 2011

3 - 18 July 2011

INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS

Directors: A.N. CHESTER - S. MARTELLUCCI

50th Course: Atoms and plasmas in super-intense laser fields

Directors: D. BATANI - C. JOACHAIN

14 - 24 July 2011

14 - 24 July 2011

• INTERNATIONAL SCHOOL ON FUSION REACTORS TECHNOLOGY

Directors: D. PALUMBO - S. MARTELLUCCI

13th Course: Plasma wall interaction in fusion devices: Physics and technology

Directors: A. PIZZUTO - G. MADDALUNO

17 - 24 July 2011

17 24 July 2011

• INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

52nd Course: Quantum phenomena in graphene, other low-dimensional materials, and optical lattices

Directors: V. FALKO - M. INGUSCIO - V. PELLEGRINI - M. POLINI

26 July – 3 August 2011

■ INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

53rd Workshop: Quantum phenomena in graphene, other low-dimensional materials, and optical lattices

Directors: V. FALKO - M. INGUSCIO - V. PELLEGRINI - M. POLINI

3 – 7 August 2011

• INTERNATIONAL SCHOOL ON MIND, BRAIN AND EDUCATION

Directors: A.M. BATTRO – K.W. FISCHER 6th Course: *Education in the digital era* Directors: A.M. BATTRO – K.W. FISCHER

3 – 7 August 2011

• ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI 44th Session – Co–Chairman: T.D. LEE

19 – 24 August 2011

• INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

144th Course: Geriatric Oncology and Hemathology 2011: update and perspectives

Director: I. CARRECA

26 August – 3 September 2011

• INTERNATIONAL SCHOOL OF ASTROPHYSICS "F. LUCCHIN"

Director: R. BUONANNO

Course on Transition from low-mass stars to giant planets and galactic bulges

Directors: G. BONO - M. ZOCCALI

4 – 11 September 2011

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• INTERNATIONAL SCHOOL OF GEOPHYSICS

Director: E. BOSCHI

36th Workshop: *Volcano observatory best practices workshop: Eruption forecasting* Directors: J. EICHELBERGER – W. MARZOCCHI – S. NAKADA – P. PAPALE

11 – 15 September 2011

• INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS

Directors: A. FAESSLER - J. WAMBACH

33rd Course: From quarks and gluons to hadrons and nuclei

Directors: A. FAESSLER - J. WAMBACH

16 – 24 September 2011

INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»

Director: F. GIANNESSI

56th Workshop: *Graph Theory*, *Algorithms and Applications*

Directors: R. CERULLI - A. GOLDBERG - G.F. ITALIANO - K. MEHLHORN - R.E. TARJAN

25 September – 3 October 2011

INTERNATIONAL SCHOOL OF MATHEMATICS «GUIDO STAMPACCHIA»

Director: F. GIANNESSI

57th Workshop: *Mathematical oncology: New challenges for systems biomedicine*

Directors: Z. AGUR - P. CERRAI - A. D'ONOFRIO - A. GANDOLFI

25 September – 1 October 2011

■ INTERNATIONAL SCHOOL OF GEOPHYSICS

Director: E. BOSCHI

37th Workshop: The Earth expansion evidence – a challenge for Geology, Geophysics and Astronomy

Directors: S. CWOJDZINSKJ - G. SCALERA

4 – 9 October 2011

• INTERNATIONAL SCHOOL OF IUS COMMUNE

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

31st Course: The formation and crisis of the great systems of law: The legacy of the Romano-canonical ius commune

Director: A. ROMANO 6 – 12 October 2011

• INTERNATIONAL WORKSHOP ON CRITICAL STABILITY OF QUANTUM FEW-BODY SYSTEMS

Directors: A. MARTIN – J.-M. RICHARD

2nd Workshop: Dynamics and structure of critically stable quantum few-body systems

Directors: A. JENSEN - A. KIEVSKY - J.-M. RICHARD

9 – 15 October 2011

• INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

145th Course: *Arrhythmia*

Directors: C. PUNTRELLO - S. IACOPINO

13 - 15 October 2011

• INTERNATIONAL SCHOOL OF ETHOLOGY

Directors: D. MAINARDI - S. PARMIGIANI

26th Workshop: The obese species: Clinical and preclinical understanding of eating and energy balance disorders

Directors: A. BARTOLOMUCCI - S. PARMIGIANI - J. RODGERS - A. VIDAL-PUIG

21 - 26 October 2011

ADVANCED WORKSHOP OF SPORTS MEDICINE «VINCENZO BAIAMONTE»

5th Workshop: *Sport-therapy in chronic diseases*

Director: F.P. SIELI 27 – 31 October 2011

INTERNATIONAL SCHOOL OF ETHOLOGY

Directors: D. MAINARDI – S. PARMIGIANI 27th Workshop: Conceptual issues in stress research Directors: J. KOOLHAAS - E. FUCHS - A. SGOIFO

1 – 7 November 2011

• INTERNATIONAL SCHOOL ON COMPLEXITY - Director: A. ZICHICHI

Co-Directors: G. BENEDEK - M. GELL-MANN - L. PIETRONERO - C. TSALLIS 14th Course: Nonlinear optics and complexity in photonic crystal fibers and nanostructures

Directors: F. BIANCALANA - C. CONTI - P.St.J. RUSSEL

8 – 13 November 2011

INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

Director: G. BENEDEK

54th Workshop: *Nanophotonics for energy efficiency*

Directors: G. BADENES - P. LAGOUDAKIS - T. SVENSSON - D.S. WIERSMA

8 – 13 November 2011

CONSULTA PERMANENTE DELLA SOCIETÀ ITALIANA DI CARDIOLOGIA

2nd Course – Chairman: S. NOVO

14 – 16 November 2011

INTERNATIONAL SCHOOL OF DERMATOLOGY

Directors: G. BURG - B. GIANNOTTI

5th Course: Old and new STDs: A multidisciplinary approach

Directors: L. ZICHICHI - G. ZUCCATI

17 – 20 November 2011

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

Directors: G.M. FARA - G. GIAMMANCO

40th Course

Directors: M.T. MONTAGNA - A.L. CARDUCCI

21 – 25 November 2011

INTERNATIONAL SCHOOL OF MEDICAL SCIENCES

146th Course: Neuroepidemiology: Methods and clinical applications

Directors: W.A. ROCCA – G. SAVETTIERI

26 November – 2 December 2011

INFN ELOISATRON PROJECT

Director: A. ZICHICHI

54th Workshop – Director: W.A. BARLETTA 30 November – 5 December 2011

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