



«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 2003 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 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.

- = WORLD FEDERATION OF SCIENTISTS – INFORMATION SECURITY MEETING
Chairman: H. WEGENER
7 – 11 March 2003

- = INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS – Directors: A.N. CHESTER – S. MARTELLUCCI
36th Course: *Advances in Quantum Information Processing: from Theory to Experiments*
Directors: S.F. HUELGA – C. MACCHIAVELLO – G.M. PALMA – M.B. PLENIO
15 – 22 March 2003

- = HIGHLY SPECIALIZED SEMINARS
Seminar on *Symmetries in Nuclear Structure*
Director: A. VITTURI
23 – 30 March 2003

- = INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION – Director: B. MARAVIGLIA
1st Course: *New NMR Strategies for Brain Investigation*
Director: B. MARAVIGLIA
6 – 10 April 2003

- = INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
115th Course: *Basic Aspects of Cardiac Surgery Today: an Update*
Director: U.F. TESLER
7 – 13 April 2003

- = INTERNATIONAL SCHOOL OF APPLIED GEOPHYSICS – Director: R. CASSINIS
12nd Workshop: *Application of Geophysical Methods to Hydrogeological Problems*
Directors: P. COSENTINO – U. YARAMANCI
11 – 18 April 2003

- = INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «G. D’ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO – M. SZKLO
31st Course: *Management of Information Flows in Public Health* – Director: S. BARBUTI
23 – 26 April 2003

- = INTERNATIONAL SCHOOL OF COSMOLOGY AND GRAVITATION – Directors: P.G. BERGMANN – V. DE SABBATA
18th Course: *The Gravitational Constant: Generalized Gravitational Theories and Experiments*
Directors: V. DE SABBATA – G.T. GILLIES – V.N. MELNIKOV
30 April – 10 May 2003

- = ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI
28th Session: *Water, Soil and Desertification, Floods, Extreme Weather Events, Climate Change*
10 – 15 May 2003

- = ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI
29th Session: *The Cultural Planetary Emergency. Focus on Terrorism*
10 – 15 May 2003

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- = INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
116th Course: *Postgraduate Course on Recent Advances in Perinatal Medicine*
Director: E.V. COSMI
15 – 20 May 2003
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- = INTERNATIONAL SCHOOL OF ATOMIC AND MOLECULAR SPECTROSCOPY – Director: B. DI BARTOLO
20th Course: *Frontiers of Optical Spectroscopy. Investigating Extreme Physical Conditions with Advanced Optical Techniques*
Directors: B. DI BARTOLO – A. VOITOVICH
16 May – 1 June 2003
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- = INTERNATIONAL SCHOOL OF GEOPHYSICS – Director: E. BOSCHI
23rd Workshop: *Seismic Risk in Urban Areas*
Directors: D. ABRAMS – C. EVA
25 – 29 May 2003
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- = INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY – Director: T.L. BLUNDELL
34th Course: *High Pressure Crystallography*
Directors: A. KATRUSIAK – P.F. McMILLAN
4 – 15 June 2003
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- = INTERNATIONAL SCHOOL OF MATHEMATICS «G. STAMPACCHIA» – Director: F. GIANNESSE
38th Course: *Variational Analysis and Applications*
Directors: F. GIANNESSE – A. MAUGERI
20 June – 1 July 2003
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- = INTERNATIONAL SCHOOL OF MATHEMATICS «G. STAMPACCHIA» – Director: F. GIANNESSE
39th Course: *Design Challenges and Mathematical Methods in Aircraft and Spacecraft*
Directors: A. FREDIANI – A. MIELE
1 – 10 July 2003
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- = INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS – Directors: A.N. CHESTER – S. MARTELLUCCI
37th Course: *Atoms, Solids and Plasmas in Super-Intense Laser Fields*
Directors: D. BATANI – C.J. JOACHAIN
5 – 15 July 2003
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- = INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS – Directors: A.N. CHESTER – S. MARTELLUCCI
38th Course: *Spectroscopic Techniques for Materials, Environment and Cultural Heritage*
Directors: N. OMENETTO – V. PALLESCHI
5 – 15 July 2003
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- = INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE – Director: O. JARDETZKY
6th Course: *Structure, Dynamics and Function of Biological Macromolecules and Assemblies*
Directors: N. PISLEWSKI – J.D. PUGLISI
10 – 22 July 2003
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- = ADVANCED SCHOOL OF HISTORY OF PHYSICS – Director: W.R. SHEA
2nd Workshop on *Science and Religion: “The Book of Nature and the Book of Scripture”*
Director: K. GIBERSON
16 – 20 July 2003
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- = INTERNATIONAL SCHOOL OF LIQUID CRYSTALS – Director: C. ZANNONI
10th Workshop: *Computational Methods for Polymers and Liquid Crystalline Polymers*
Directors: P. PASINI – S. ZUMER
16 – 22 July 2003
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- = INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS – Director: G. BENEDEK
27th Workshop: *Intrinsic Localized Modes and Discrete Breathers in Nonlinear Lattices*
Directors: V. HIZHNYAKOV – A.J. SIEVERS
21 – 27 July 2003
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- = INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS – Director: G. BENEDEK
28th Workshop: *Localisation by Nonlinearity and Spatial Discreteness, and Energy Transfer in Crystals, Biomolecules and Josephson Arrays*
Directors: S. FLACH – R. MacKAY – M. PEYRARD
21 – 27 July 2003

 - = INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS – Director: G. BENEDEK
29th Course: *Gas-Phase Cluster Assembling of Nanostructured Materials*
Directors: R. McCURRY – P. MILANI – S. PRATZINIS
26 July – 1 August 2003

 - = ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES – Chairman: A. ZICHICHI
30th Session
Co-Chairmen: T.D. LEE – K.M.B. SIEGBAHN
19 – 24 August 2003

 - = INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS – Director: A. ZICHICHI
41st Course: *From Quarks to Black Holes: Progress in Understanding the Logic of Nature*
Directors: G. 't HOOFT – A. ZICHICHI
29 August – 7 September 2003

 - = INFN ELOISATRON PROJECT – Director: A. ZICHICHI
41st Workshop: *Physics of Hadronic Interactions with Nucleons and Nuclei at Extreme Energies*
Director: L. CIFARELLI
29 August – 7 September 2003

 - = INTERNATIONAL SCHOOL OF NUCLEAR PHYSICS – Director: A. FAESSLER
25th Course: *Heavy Ion Reactions from Nuclear to Quark Matter*
Director: A. FAESSLER
16 – 24 September 2003

 - = WORKSHOP ON CARDIAC ENGINEERING: FROM GENES AND CELLS TO CARDIAC STRUCTURE AND FUNCTION
Directors: R. BEYAR – G. CONDORELLI – S. SIDEMAN
20 – 24 September 2003

 - = INTERNATIONAL SCHOOL OF PHARMACOLOGY – Directors: P. BENIGNO – G.P. VELO
68th Workshop: *Drug Scientific Information*
Director: G.P. VELO
25 – 29 September 2003

 - = INFN ELOISATRON PROJECT – Director: A. ZICHICHI
42nd Workshop: *Innovative Detectors for Supercolliders*
Directors: E. NAPPI – J. SEGUINOT
28 September – 4 October 2003

 - = WORKSHOP ON "DISEGNO E METODI DELL'INGEGNERIA INDUSTRIALE"
Directors: F. CAPUTO – F. CAPPELLO
29 September – 1 October 2003

 - = INTERNATIONAL SCHOOL OF IUS COMMUNE – Directors: M. BELLOMO – K. PENNINGTON
23rd Course: *New Rules through Old. The Ius Commune during the XVI-XVIII Centuries*
Director: U. PETRONIO
2 – 9 October 2003
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- = INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS – Director: G. BENEDEK
30th Course: *Symmetry and Heterogeneity*
Directors: A.F. ANDREEV – A. BIANCONI
4 – 10 October 2003
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- = GIORNATE INTERNAZIONALI DI STUDI SULL'AREA ELIMA «GIUSEPPE NENCI» – Director: C. AMPOLO
Quinte Giornate Internazionali di Studi sull'Area Elima e la Sicilia Occidentale nel Contesto Mediterraneo: Guerra e Pace in Sicilia e nel Mediterraneo Antico (VIII-III sec. a.C.): Arti, Prassi e Teoria della Pace e della Guerra
Director: C. AMPOLO
11 – 15 October 2003
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- = INTERNATIONAL SCHOOL OF ETHOLOGY – Director: D. MAINARDI
20th Workshop: *Individual Differences in Behavior and Physiology: Causes and Consequences*
Directors: R. BANDLER – J. KOOLHAAS – S. PARMIGIANI – A. SGOIFO
18 – 23 October 2003
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- = INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS – Directors: A.N. CHESTER – S. MARTELLUCCI
39th Course: *Microresonators as Building Blocks for VLSI Photonics*
Directors: M. BERTOLOTTI – A. DRIESSEN – F. MICHELOTTI
18 – 25 October 2003
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- = INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
117th Course: *Signal Transduction and Communication in the Cancer Cells*
Directors: H.L. BRADLOW – L. CASTAGNETTA – L. MASSIMO – K. ZÄNKER
24 – 31 October 2003
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- = INFN ELOISATRON PROJECT – Director: A. ZICHICHI
43rd Workshop: *Superconductors and Supermagnets*
Director: W. BARLETTA
26 October – 1 November 2003
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- = INTERNATIONAL SCHOOL ON NEURAL NETS «E. CAIANIELLO» – Directors: M.I. JORDAN – M. MARINARO
6th Course: *Computational Neuroscience: Cortical Dynamics*
Directors: P. ERDI – M. MARINARO
31 October – 7 November 2003
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- = INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
118th Workshop: *Specific Topics on Geriatrics and Oncology*
Directors: L. BALDUCCI – I. CARRECA
8 – 11 November 2003
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- = INTERNATIONAL SCHOOL OF EPIDEMIOLOGY AND PREVENTIVE MEDICINE «G. D'ALESSANDRO»
Directors: G.M. FARA – G. GIAMMANCO – M. SZKLO
32nd Course: *Health Promotion in Childhood and Adolescence* - Directors: R. BURGIO - M.T. TENCONI
11 – 15 November 2003
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- = INTERNATIONAL SCHOOL OF ETHOLOGY – Director: D. MAINARDI
24 – 29 November 2003
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- = INTERNATIONAL SCHOOL OF MEDICAL SCIENCES
119th Course: *Dermatology* - Director: L. ZICHICHI
29 – 30 November 2003
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