

calendar

MAY 1983

2-4 **Symp on Delt-Nucleus Dynamics** Argonne, IL 3/83

2-6 **29th Int Instrumentation Symp** Albuquerque, NM 3/83

2-6 **Int Conf on Fronts, Interfaces and Patterns** Los Alamos, NM 3/83

2-6 **Short Course on Laser Design and Beam Control** Albuquerque, NM 3/83

2-6 **Acousto-Optic, Electro-Optic, and Guided Wave Devices Short Course** Paramus, NJ 3/83

5-7 **4th Conf on Acoustics and the Physics of Sound and Music** Iowa City, IA 3/83

6-7 **Zone 7 SPS with Ohio Sec APS** Columbus, OH 1/83

8-13 **Symp on Silicon Nitride Thin Insulating Films** San Francisco 9/82

8-13 **31st Ann Conf on Mass Spectrometry and Applied Topics** Boston, MA 1/83

8-14 **ASA 105th Mtg** Cincinnati, OH 9/81

9-12 **6th Princeton Conf on Space Manufacturing** Princeton, NJ 1/83

9-13 **Short Course on Laser Beam Propagation and Interaction Effects** Las Cruces, NM 3/83

9-13 **Short Course on Advances in Polymer Synthesis, Modification and Characterization** New Paltz, NY 3/83

10-12 **Laboratory Instrument and Equipment Conf and Exhibition** San Jose, CA 11/82

11-14 **11th Western Regional Mtg of Electron Microscopists** Pacific Grove, CA 3/83

15-19 **7th Int Conf on Liquefied Natural Gas** Jakarta, Indonesia (S. Booth, Inst. of Gas Tech., 3424 South State St., Chicago, IL 60616 [(312)567-3791])

16-17 **Mtg on Institutional Stability and the Disposal of Nuclear and Chemically Toxic Wastes** [MIT Dept. of Nuclear Eng.] Cambridge, MA (M. M. Miller, 24-109, Dept. of Nuclear Eng., MIT, Cambridge, MA 02139 [(617)253-3848])

16-18 **33rd Electronics Components Conf** Orlando, FL 11/82

16-18 **Conf on Inverse Scattering: Theory and Applications** Tulsa, OK 3/83

16-19 **Int Conf and Exhibition of Fiber Optics, Materials, Processes and Applications** Paris 3/83

16-20 **5th Nat Conf and School on X-ray Analysis** Melbourne, Australia 9/82

16-20 **Int Conf on Radioactive Waste Management** Seattle, WA 9/82

16-27 **Optical Science & Eng Short Course** Tucson, AZ 3/83

17-19 **Nat Aerospace and Electronics Conf (NAECON)** Dayton, OH 11/82

17-20 **Conf on Lasers and Electro-optics** Baltimore 1/82

17-20 **2nd Int Precision Eng Seminar** Gaithersburg, MD (R. Hocken, Metrology Bldg., B104, NBS, Washington, DC 20234)

18-20 **2nd Int Whitsun Mtg on Self-Organization and Dissipative Structures** Austrian Raiffeisen Bank 1/83

19-20 **Applications and Techniques of Modern Spectrochemistry** Los Alamos, NM 9/82

19-21 **SERI Photovoltaic Advanced R & D Program 5th Ann Rev Mtg** Denver, CO (SERI, Conf. Coord. Sec., 1617 Cole Blvd. Golden, CO 80401)

22-25 **2nd Int Conf on Picture Archiving & Communication Systems for Medical Applications** [SPIE] Kansas City, MO (SPIE, PO Box 10, Bellingham, WA 98227 [(206)676-3290])

22-8 **Phenomenology of Unified Theories from Standard Model to Supersymmetries** Dubrovnik, Yugoslavia 9/82

23-25 **Int Conf on Plasma Sci** San Diego, CA 9/82

23-25 **Mtg of APS Div of Electron and Atomic Phys** Boulder, CO 5/82

23-25 **Short Course on RF Heating and Current Drive in Magnetic Fusion Plasmas** San Diego, CA (1/83)

23-25 **Custom Integrated Circuits Conf** [IEEE] Rochester, NY (A. Silzars, Tektronix, MS-50-479, PO Box 500, Beaverton, OR 97077 [(503)627-6980])

23-26 **Int Symp on Structure and Bonding of Non-Crystalline Solids** [NBS, Office of Naval Res., COMSAT] Reston, VA (J. Kruger, B254 Materials Bldg., NBS, Washington, DC 20234 [(301)921-2094])

23-27 **6th Int Conf on Ion Beam Analysis** Tempe, AZ 1/83

23-4 **NATO Adv Study Inst in Electrodynamics and Quantum Optics** Aspen, CO 3/83

24-27 **Short Course on Designing VLSI** San Diego, CA 3/83

25-26 **Trends and Applications** [NBS, IEEE Computer Soc.] Gaithersburg, MD 9/82

Coding: date title [sponsor] location (contact) [abstract deadline] PHYSICS TODAY issue containing full listing

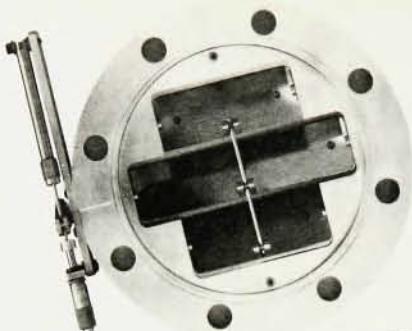
Please note: A calendar entry preceded by an → is a new and complete listing. A ● denotes an entry that contains additional or revised information. An entry not preceded by either symbol is an abridged version of a complete listing previously published in PHYSICS TODAY. The date at the end of an abridged entry specifies the issue in which the item originally appeared.

Abbreviations:

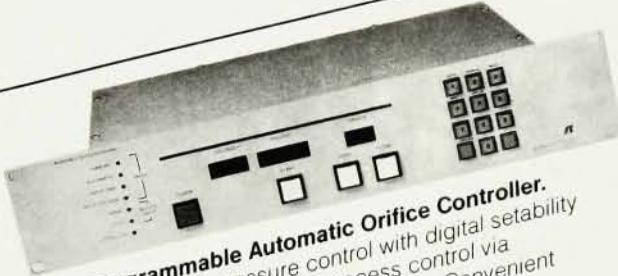
AAAS American Association for the Advancement of Science
AAPM American Association of Physicists in Medicine
AAPT American Association of Physics Teachers
AAS American Astronomical Society
ACA American Crystallographic Association
AGU American Geophysical Union
ANS American Nuclear Society
APS American Physical Society
ASA Acoustical Society of America
AVS American Vacuum Society
CNRS Centre National de la Recherche Scientifique
DOE Department of Energy
DPG Deutsche Physikalische Gesellschaft
IAEA International Atomic Energy Agency
IAU International Astronomical Union

IEEE Institute of Electrical and Electronics Engineers
IOP The Institute of Physics
IUPAC International Union of Pure and Applied Chemistry
IUPAP International Union of Pure and Applied Physics
LBL Lawrence Berkeley Laboratory
LLNL Lawrence Livermore Laboratory
NAS National Academy of Sciences
NBS National Bureau of Standards
NRC Nuclear Regulatory Commission
NRL Naval Research Laboratory
NSF National Science Foundation
ONR Office of Naval Research
ORNL Oak Ridge National Laboratory
OSA Optical Society of America
S of R Society of Rheology
SPS Society of Physics Students

A calendar of physics-related meetings is included only in alternate (odd-numbered) months. Send information to: Calendar, PHYSICS TODAY, 335 East 45th Street, New York, N.Y. 10017. A notice should be timed to arrive three months before the listing should appear.



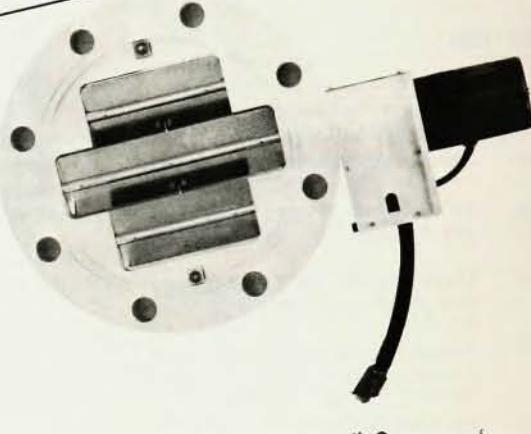
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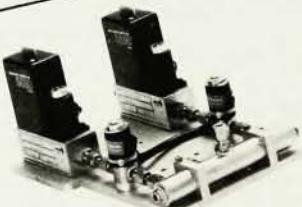
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MD (D. Benigni, A258 Tech. Bldg., NBS, Washington, DC 20234 [(301)921-2431])

25-28 **Quantum Theory and Gravitation** II New Orleans, LA 11/82

26-31 **AAAS Ann Mtg** Detroit 9/81

29-3 **4th Int Conf on Fluidization** Kashikojima, Japan 9/81

30-2 **Conf on the Computation of Electromagnetic Fields** Santa Margherita Ligure, Italy 11/82

30-3 **2nd Int Conf on Radiation Effects in Insulators** Albuquerque, NM 9/82

30-3 **Int Symp on Electron, Ion and Photon Beams** Los Angeles 3/83

31-3 **1983 IEEE Microwave and Millimeter Monolithic Circuits Symp** Boston, MA 1/83

JUNE 1983

1-3 **37th Ann Frequency Control Symp** Philadelphia 11/82

5-8 **8th Int Symp on Ultrasonic Imaging and Tissue Characterization** Washington, DC 3/83

5-10 **Electronic Excitations and Interaction Processes in Organic Molecular Aggregates** Bavaria, FRG 3/83

6-7 **Short Course on Techniques for Surface Analysis** Dayton, OH 1/83

6-8 **4th IEEE Int Pulsed Power Conf** Albuquerque, NM 5/82

6-8 **8th Int Symp on Ultrasonic Tissue Characterization** [NBS, NIH] Washington, DC (M. Linzer, A366 Materials Bldg., NBS, Washington, DC 20234 [(301)921-2611])

6-9 **Milestones and Trends in Polymer Sci: A Tribute to Turner Alfrey** Midland, MI 5/82

6-10 **2nd Int Symp on Optical Mass Data Storage** Arlington, VA 9/82

6-10 **Short Course on Fundamentals and Applications of Lasers** Washington, DC (Ed. Dir., Laser Inst. of America, 5151 Monroe St., Ste. 103W, Toledo, OH 43623 [(419)882-8706])

7-9 **Dynamics Days: Twente** Enschede, The Netherlands 11/82

7-10 **Short Course on VLSI Process and Device Modeling** Heverlee, Belgium 3/83

8-10 **5th Symp on Applied Surface Analysis** Dayton, OH 1/83

9-10 **Optical Disks, Systems and Applications** Arlington, VA (SPIE, PO Box 10, Bellingham, WA 98227-0010 [(206)676-3290])

12-16 **EUCHEM Conf on High Resolution Electron Microscopy in Solid State Chem** Stockholm 11/82

12-17 **ANS Ann Mtg** Detroit 1/82

12-18 **Asia Pacific Phys Conf** Singapore 3/83

13-14 **Int Short Course on Finite Element Programming: Semiconductor Device and Process Modeling** Galway, Ireland 3/83

13-15 **5th Rochester Conf on Coherence and Quantum Optics** Rochester, NY 9/82

13-15 **1st World Forum of the Int Academy of Astronautics** Montreal 3/83

13-15 **Short Course on Optical Fiber Technology for Communications** Newark, NJ (Ed. Dir., Laser Inst. of America, 5151 Monroe St., Ste. 103W, Toledo, OH 43623 [(419)882-8706])

13-17 **Short Course on the Personal Computer** Ann Arbor, MI 3/83

13-17 **Short Course on Fundamentals of Conventional & Laser Spectroscopy** Albuquerque, NM (Ed. Dir., Laser Inst. of America, 5151 Monroe St., Ste. 103W, Toledo, OH 43623 [(419)882-8706])

13-17 **Gordon Res Conf on Physical Organic Chemistry** Wolfeboro, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

13-17 **Gordon Res Conf on Space Plasma Physics** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

14-16 **94th Ann Sci Mtg of the Astronomical Soc of the Pacific** Kona Coast of Hawaii 11/82

14-16 **Int Conf on Optical Techniques in Flow Monitoring and Process Control** The Hague, The Netherlands (Conf. Org., Optical Techniques, BHRA, Fluid Eng., Cranfield, Bedford, MK43 OAJ, UK)

14-17 **Short Course on Designing VLSI** Boston 3/83

15-17 **3rd Conf on Numerical Analysis of Semiconductor Devices and Integrated Circuits (NASECODE III)** Galway, Ireland 1/82

15-17 **AAPT Mtg** Memphis, TN 9/82

15-17 **Short Course on Conducting Polymers** New Paltz, NY 3/83

15-18 **Top Mtg on Optical Bistability** Rochester, NY 9/82

15-25 **NATO Adv Study Inst on Modulated Structure Materials** Crete, Greece

16-18 **AAS Div on Dynamical Astronomy** Chicago 3/83

16-30 **NATO Adv Study Inst on Energy Transfer Processes in Condensed Matter** Erice, Italy 11/82

18-30 **Magneto-Structural Correlations in Exchange Coupled Systems** Castiglione della Pescaia, Italy 1/83

19-22 **AAS 162nd Ann Mtg** Minneapolis, MN 9/82

19-1 **NATO Adv Study Institute on Percolation, Localization and Superconductivity** Les Arcs, France 3/83

20-22 **43rd Ann Conf on Physical Electronics** Santa Fe, NM 9/82

20-24 **Summer Program on Optical Signal Processing** Troy, NY 3/83

20-24 **Advances in the Stabilization and Controlled Degradation of Polymers** New Paltz, NY 3/83

20-24 **Gordon Res Conf on Physical Metallurgy** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

20-24 **Gordon Res Conf on Plasma Physics** New London, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

20-24 **Gordon Res Conf on Environmental Sciences: Air** New Hampton, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

20-24 **Gordon Res Conf on Magnetic Resonance** Wolfeboro, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

20-25 **Quantum Chaos** Como, Italy 9/82

20-25 **Int CNRS Colloquium on Optogalvanic Spectroscopy and Its Applications** Aussios, France 1/83

21-23 **9th Int Symp on Machine Processing of Remotely Sensed Data** West Lafayette, IN 1/83

21-23 **41st Ann Device Res Conf** Burlington, VT 3/83

21-24 **5th Conf on the Phys of the Jovian and Saturnian Magnetospheres** Cambridge, MA 9/82

22-24 **AAS Div of Solar Physics** Pasadena, CA 3/83

23-24 **9th West Coast Statistical Mechanics Conf** Los Alamos, NM 1/83

23-24 **Jt Top Mtg on Information Processing in Astronomy and Optics** St. Paul, MN 3/83

23-24 **Symp on Molecular Mechanics** Indianapolis, IN 3/83

23-24 **Top Mtg on Information Processing in Astronomy and Optics** Minneapolis, MN (OSA, 1816 Jefferson Pl., NW, Washington, DC 20036 [(202)223-8130])

23-25 **9th Can Sem on Surfaces** Vancouver, BC 11/82

23-25 **Workshop on Time Projection Chambers and Experiments Based on TPC's** Vancouver, Canada (J. A. Macdonald, TRIUMF, 4004 Wesbrook Mall, Vancouver, Canada V6T 2A3)

26-1 **1983 Conf on the Dynamics of Molecular Collisions** Gull Lake, MN 11/82

26-1 **3rd Int Symp on Magnetic Resonance in Colloid and Interface Science** Torun, Poland 1/83

27-30 **4th Int Conf on Integrated Optics and Optical Fiber Communication** Tokyo 9/82

27-1 **3rd Symp on Separation Sci and Tech for Energy Applications** Gatlinburg, TN 9/82

27-1 **6th Int Conf on Laser Spectroscopy** Interlaken, Switz. 9/82

27-1 **Int Conf on Phase Transformations in Solids [MRS]** Crete, Greece 1/83

27-1 **Europysics Study Conf on Frontiers of γ - and X-ray Spectroscopy** Crete, Greece 3/83

"It is...a hope and a prophecy that this book will soon become essential knowledge for all those engaged in the development of science...Professor Santilli's discussion of the subject distinguishes itself by completeness, mathematical rigor, and clarity of physical applications."

R. Mignani
University of Rome

Foundations of Theoretical Mechanics I and II

Ruggero M. Santilli, Basic Institute for Research, Cambridge, Massachusetts

The Importance...

The contemporary conception of Galilei's relativity is based on systems of particles that are both closed—in the sense that they verify conservation laws—and are Hamiltonian-type,—or have constituents that are approximated as being point-like. Because most real systems are non-Hamiltonian, its applications have, for the most part, been limited to theoretical exercises.

Professor Santilli, drawing from mechanics, geometry, and algebra, develops a generalization of Galilei's relativity for closed systems that considers both Hamiltonian and non-Hamiltonian internal forces. Based on original research, Santilli's discovery essentially establishes a new branch of physics, with important applications in statistical and space mechanics, theoretical biophysics, particle physics, and engineering.

The Books...

Volume I, **The Inverse Problem in Newtonian Mechanics** develops the conditions in which an arbitrary Newtonian system can be integrated to admit a Lagrangian or, independently, a Hamiltonian representation. In addition, it surveys results in the field going back three centuries. Building on the findings of the first volume, **Birkhoffian Generalization of Hamiltonian Mechanics** constructs a step-by-step generalization of Hamiltonian mechanics—a generalization that on one hand, preserves the analytic, Lie, and symplectic characters of Hamilton's equations, yet, on the other, it expresses the principle in the most general form possible. This constitutes the foundations of generalized relativity. The numerous examples and applications which are cited throughout the text emphasize the direct universality of the new mechanics for local non-Hamiltonian systems.

Foundations of Theoretical Mechanics

Volume I:

The Inverse Problem in Newtonian Mechanics
1978/266 pp./5 illus./cloth \$37.00
(Texts and Monographs in Physics)
ISBN 0-387-08874-1

Volume II:

Birkhoffian Generalization of Hamiltonian Mechanics
1983/370 pp./cloth \$66.00
(Texts and Monographs in Physics)
ISBN 0-387-09482-2



The Reviews...

Volume I:

"Truly epoch-making... It can be said that this is a remarkable book of highest quality and greatest importance to anyone who is interested in the progress of theoretical mechanics."

—H.P. Leipholz, University of Waterloo,
JOURNAL OF APPLIED MECHANICS

"This outstanding book treats the title problem, which is making rapid and significant impact in mechanics as well as control theory... Reviewer recommends this text highly."

—L.Y. Bahar, Drexel University, AMR

Volume II:

"It's all to Professor Santilli's credit that in the second volume of his treatise he proves the existence of a mathematical structure of Lie type capable of these (non-potential) interactions."

"The monograph is an excellent completion of the existing literature. It deserves the attention of all students as well as researchers, who deal with classical mechanics and/or field theory."

—J. Kobussen, Swiss Federal Institute for Reactor Research



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27-1 **Synthetic Aperture Radar Short Course** Ann Arbor, MI 3/83

27-1 **→ Gordon Res Conf on Liquid Crystals** Wolfeboro, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

27-8 **Short Course on Relativity, Groups and Topology** Les Houches, France 11/82

28-1 **6th High Energy Heavy Ion Study-Workshop on Anomalons** Berkeley, CA 3/83

28-17 **→ Short Course on Highlights of Condensed Matter Theory** Varenna, Italy (M. P. Tosi, ICTP, Maramare, Trieste, Italy)

JULY 1983

1-15 **→ 5th EPS School on Materials Science: Magnetic Phase Transitions** Erice, Italy (R. J. Elliott, Dept. of Theoretical Phys., 1 Keble Road, Oxford OX1 3NP, UK)

2-14 **NATO Adv Study Inst on Regular and Chaotic Motions in Dynamical Systems** Erice, Italy 3/83

3-16 **Magnetic Resonance Techniques in Fossil Energy Problems** Crete, Greece 1/83

4-5 **4th Top Mtg on Gradient Index Optical Systems** Kobe, Japan 9/82

4-8 **9th Int Colloquium on Dynamics of Explosions and Reactive Systems** Poitiers, France 9/82

4-8 **1st Int Conf on Conduction and Breakdown in Solid Dielectrics** Toulouse, France 9/82

4-8 **→ Gordon Res Conf on Atomic Physics** New London, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

4-8 **→ Gordon Res Conf on Fuel Science** [New Hampton, NH] (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

4-8 **→ Gordon Res Conf on Science & Technology of Biomaterials** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

4-8 **→ Gordon Res Conf on Chemistry & Physics of Solids** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

4-9 **10th Int Conf on General Relativity and Gravitation** Venice 1/82

6-22 **NATO Adv Study Inst on Particles and Fields** Cargese, Corsica, France 3/83

9-13 **3rd Int Symp on Small Particles and Inorganic Clusters** Berlin, 3/83

10-23 **NATO Adv Study Inst on Phys of Submicron Semiconductor Devices** San Miniato, Italy 1/83

11-13 **1983 Summer Computer Simulation Conf** Vancouver, BC 9/82

11-14 **7th Int Symp on Nuclear Quadrupole Resonance** Queen's Univ., Kingston, Ontario 11/82

11-15 **Phys of Latent Image Formation in Silver Halides** Trieste, Italy 11/82

11-15 **Short Course on Fiber Optic Communication Systems** Santa Barbara, CA 3/83

11-15 **Summer Course in Optical System Design** Rochester, NY 3/83

11-15 **→ Gordon Res Conf on Point & Line Defects in Semiconductors** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

11-15 **→ Short Course on Corrosion: Environmental Degradation of Materials** Cambridge, MA (Summer Session, Room E19-356, MIT, Cambridge, MA 02139)

11-16 **Short Course in Design and Analysis of Scientific Experiments** Cambridge, MA 3/83

11-22 **Santa Cruz Summer Workshop in Astronomy & Astrophys (High Energy Transients)** Santa Cruz, CA 3/83

11-22 **Short Course on Lasers and Optics for Applications** Cambridge, MA 3/83

11-22 **Summer Course in Contemporary Optics** Rochester, NY 3/83

12-15 **→ Short Course on Designing VLSI** Washington, DC (R. Dordick, Integrated Computer Sys., 3304 Pico Blvd., PO Box 5339, Santa Monica, CA 90405)

13-15 **Internoise '83** Univ. of Edinburgh, Scotland 9/82

13-15 **Int Workshop in X- and γ -ray Imaging Techniques** Southampton, UK 3/83

13-19 **→ 95th Ann Scientific & Membership Mtg on the Astronomical Soc of the Pacific/Ann Mtg of the Western Amateur Astronomers Hawaii** (J. G. Phillips, Dept. of Astronomy, Univ. of CA, Berkeley, CA 94720)

17-22 **1983 Summer Mtg IEEE Power Eng Soc** Los Angeles 1/83

18-20 **→ 20th Ann Conf on Nuclear and Space Radiation Effects** Gatlinburg, TN (F. Hartman, Div. 9336, Sandia Nat. Labs, Albuquerque, NM 87185)

18-21 **→ Shock Waves in Condensed Matter** Santa Fe, NM (W. W. Havens Jr, 335 E. 45th St., New York, NY 10017 [(212)661-9404])

18-22 **10th Int Conf in Atomic Collisions in Solids** Bad Isburg, FRG 3/83

18-22 **Principles of Microcomputers and Microprocessors** Ann Arbor, MI 3/83

18-22 **Course in Digital and Optical Image Processing** Rochester, NY 3/83

18-22 **Short Course on Computer Image Analysis** Ann Arbor, MI 3/83

18-22 **Short Course in Guided Wave Optics** Rochester, NY 3/83

18-22 **Short Course in Applied Molecular Spectroscopy: Infrared** Tempe, AZ 3/83

18-22 **Summer Program on Plasma Processing for Microelectronic Fabrication** Cambridge, MA 3/83

18-22 **→ Gordon Res Conf on Spectroscopy of Matrix Isolated Species** New London, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

18-22 **→ Gordon Res Conf on Formation & Properties of Metal Hydrides** Tilton, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

18-22 **→ Gordon Res Conf on Ion Exchange** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

18-22 **→ Gordon Res Conf on Laser Diagnostic Combustion** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

18-22 **→ Ann Mtg of the National Conf on Weights and Measures [NBS]** Sacramento, CA (A. P. Heffernan, A207 Metrology Bldg., NBS, Washington, DC 20234 [(301)921-3677])

18-29 **1983 SLAC Summer Inst on Particle Phys** Stanford, CA 1/83

19-21 **Inter/Micro-83** Cambridge, UK 3/83

20-30 **School on Direct Methods and Macromolecular Crystallography** Buffalo, NY 3/83

24-25 **→ 1983 Int Symp on Collisions in Strong Fields** Bielefeld, FRG (H. E. Roosendaal, Fakultat fur Physik, Universitat Bielefeld, D-4800 Bielefeld 1, FRG)

24-29 **Conf on the Undergraduate Engineering Lab** Henniker, NH 3/83

25-28 **9th Int High-Pressure Conf** Albany, NY 9/82

25-29 **Computer Simulation of Quantum Systems** Trieste, Italy 11/82

25-29 **15th IUPAP Int Conf on Thermodynamics and Statistical Mechanics** Edinburgh, Scotland 1/83

25-29 **Short Course on Written Communications for Engineers, Scientists and Technical Writers** Ann Arbor, MI 3/83

25-29 **Short Course on the Detection of Infrared Radiation** Santa Barbara, CA 3/83

25-29 **→ Gordon Res Conf on Fluids in Permeable Media: Physics & Chemistry** Tilton, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

25-29 **→ Gordon Res Conf on Quantitative Structure Activity Relationships** Plymouth, NH (E. M. Cruickshank,



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25-29 → **Gordon Res Conf on Solid State Studies in Ceramics** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

26-7 **NATO Advanced Study Inst on NMR of Liquid Crystals** San Miniato, Italy 1/83

31-4 **AAPM Ann Mtg** New York 9/82

31-20 → **Summer Program in Statistical and Particle Physics: Common Problems and Techniques** (D. J. Wallace, Dept. of Phys., Univ. of Edinburgh, James Clerk Maxwell Bldg., The King's Bldgs., Mayfield Rd, Edinburgh, EH9 3JZ Scotland)

AUGUST 1983

1-4 → **2nd Top Mtg on Coherent Laser Radar: Technology and Applications** Aspen, CO (OSA, 1816 Jefferson Pl., NW, Washington, DC 20036 [(202)223-8130])

1-5 **ACA Snowmass Colorado Mtg** Snowmass, CO 9/82

1-5 **75th Jubilee Conf on Helium-4** St. Andrews, Scotland 9/82

1-5 → **Summer Program on Optical Propagation, Detection and Communication** Cambridge, MA (Dir. of Summer Sessions, Room E19-356, MIT, Cambridge, MA 02139 [(617)253-4179])

1-5 → **Short Course on Industrial Rheology** Cambridge, MA (C. Kyun Rha, Rm 56-137, Biomaterials Sci. and Eng. Lab., MIT, Cambridge, MA 02139 [(617)253-3493])

1-5 → **Gordon Res Conf on Dynamics of Gas Surface Interaction** Plymouth, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

1-5 → **Gordon Res Conf on Nonlinear Optics** Wolfeboro, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

1-5 → **30th Int Field Emission Symp** Philadelphia (W. R. Graham, Univ. of PA, LRSM-K1, 3231 Walnut St., Philadelphia, PA 19104)

1-5 → **Path Integrals from meV to MeV** Albany, NY (A. Inomata, Phys. Dept., SUNY-Albany, Albany, NY 12222 [(518)457-8318])

1-10 **7th Int Cong on Mathematical Phys** Boulder, CO 1/83

1-10 → **Int School on Teaching Crystallography for Materials Science** Brasilia, Brazil (S. C. Ellis, Inst. de Fisica, UNICAMP-C.P. 1170, 13100 Campinas, S.P. Brazil)

1-11 → **NATO Adv Study Inst on Non-equilibrium Cooperative Phenomena in Physics** El Escorial, Spain (M. G. Velarde, U.N.E.D.-Ciencias, Apdo. Correos 50 487, Madrid, Spain)

2-5 → **Short Course on Designing VLSI** San Francisco (R. Dordick, Integrated Computer Sys., 3304 Pico Blvd., PO Box 5339, Santa Monica, CA 90405)

4-9 **Int Symp on Lepton and Photon Interactions at High Energies** Ithaca, NY 1/83

6-12 **41st Ann Mtg of the Electron Microscopy Soc of Am** Phoenix, AZ 1/83

7-10 → **Applications of X-ray Topographic Methods of Materials Science** Snowmass, CO (S. Weissman, Dept. of Mechanics & Materials Sci., Rutgers Univ., Piscataway, NJ 08854)

7-12 **8th Canadian Theoretical Chem Symp** Halifax, NS, Canada 9/81

7-12 **Illuminating Eng Soc 1983 Ann Conf** Los Angeles 1/83

7-12 → **Ann Rev of Progress in Quantitative Non-destructive Evaluation** [DARPA] Santa Cruz, CA (D. O. Thompson, Ames Lab., IA State Univ., Ames, IA 50011 [(515)294-8152])

7-27 → **NATO Adv Study Inst in Quantitative Electron Microscopy** Glasgow, Scotland (R. P. Ferrier, Dept. of Natural Philosophy, Univ. of Glasgow, Glasgow G12 8QQ UK)

8-12 **7th Int Conf on Vacuum Ultraviolet Radiation Phys** Jerusalem 9/82

8-12 → **8th Eur Crystallographic Mtg** Liège, Belgium (ECM-8 Sec., Univ. de Liège au Sart Tilman, Lab. de Crystallographie, Inst. de Physique B5, B-4000 Liège, Belgium)

8-12 → **Gordon Res Conf on Elementary Particle Interaction** Andover, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

8-2 **Short Course on the Birth and Infancy of Stars** Les Houches, France 11/82

11-16 **12th Int Conf on High-Energy Accelerators** Batavia, IL 9/82

11-24 → **9th Hawaii Topical Conf in Particle Phys** Honolulu (C. Chong, Dept. of Phys. and Astro., Univ. of HI, 2505 Correa Rd., Honolulu, HI 96822 [(808)948-7391])

13-28 **2nd Workshop on Nonlinear Evolution Equations and Dynamical Systems** Chania, Crete, Greece 9/82

14-19 **6th Int EPR Sym and NMR Symp** Denver, CO 1/83

15-17 **4th Int Conf on Mathematical Modelling** Zurich, Switz. 9/82

15-19 **5th Int Conf on Liquid and Amorphous Metal** Los Angeles 1/83

15-19 → **Cryogenic Eng Conf and Int Cryogenic Materials Conf** Colorado Springs, CO (L. L. Wise, Centennial Conf., 1215 Mapleton, Boulder, CO 80302 [(303)449-8320])

15-19 → **Gordon Res Conf on Energy Coupling Mechanisms** Andover, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

15-19 → **Gordon Res Conf on Nuclear Structure Physics** Tilton, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

15-19 → **Gordon Res Conf on Quantum Solids & Fluids** Wolfeboro, NH (E. M. Cruickshank, Univ. of RI, Kingston, RI 02881 [(401)783-4011]; after 13 June Colby-Sawyer College, New London, NH 03257 [(603)526-2870])

16-19 → **Short Course on Landsat Sensor Design & Operation** Santa Barbara, CA (J. Weisman, UCSB Extension, Santa Barbara, CA 93106 [(805)961-3697])

17-19 → **Techniques for Extracting Information from Remotely Sensed Images** Rochester, NY (Soc. of Photographic Scientists and Eng., 7003 Kilworth Lane, Springfield, VA 22151 [(703)642-9090])

21-2 **Moment Formation in Solids** Vancouver Island, BC, Canada 11/82

21-26 → **27th Ann Int Technical Symp and Instrument Display** [SPIE] San Diego, CA (SPIE, PO Box 10, Bellingham, WA 98227 [(206)676-3290])

21-27 **10th Int Conf on Few Body Problems in Phys** Karlsruhe, FRG 9/82

22-26 → **4th Int Conf on Phonon Scattering in Condensed Matter** Stuttgart, FRG (Phonon Conf., Physikalisches Inst., Pfaffenwaldring 57, D-7000 Stuttgart 80, FRG)

22-26 → **6th Int Summer Inst in Surface Sci** Milwaukee, WI (R. Vanselow, Chem. 343, Univ. of WI, Milwaukee, WI 53201 [(414)963-5223])

29-3 **16th Int Conf on Phenomena in Ionized Gases** Dusseldorf, FRG 9/81

29-3 → **3rd Int Conf on Recent Progress in Many-Body Theories** Altenberg, FRG (M. L. Ristig, Inst. für Theoretische Physik, Universität zu Köln, Zülpicher Str. 77, D-5000 Köln 1, FRG)

30-2 **Electron Microscopy and Analysis Group** Surrey, UK 9/82

30-2 → **14th Mtg of the Society of Crystallographers in Australia** Pater-son, New South Wales (H. R. Tietze, Dept. of Chem., Univ. of Newcastle, NSW 2308, Australia)

31-2 **1983 Int Geoscience and Remote Sensing Symp** San Francisco 11/82

31-8 **20th CIE Congress** Amsterdam 9/82

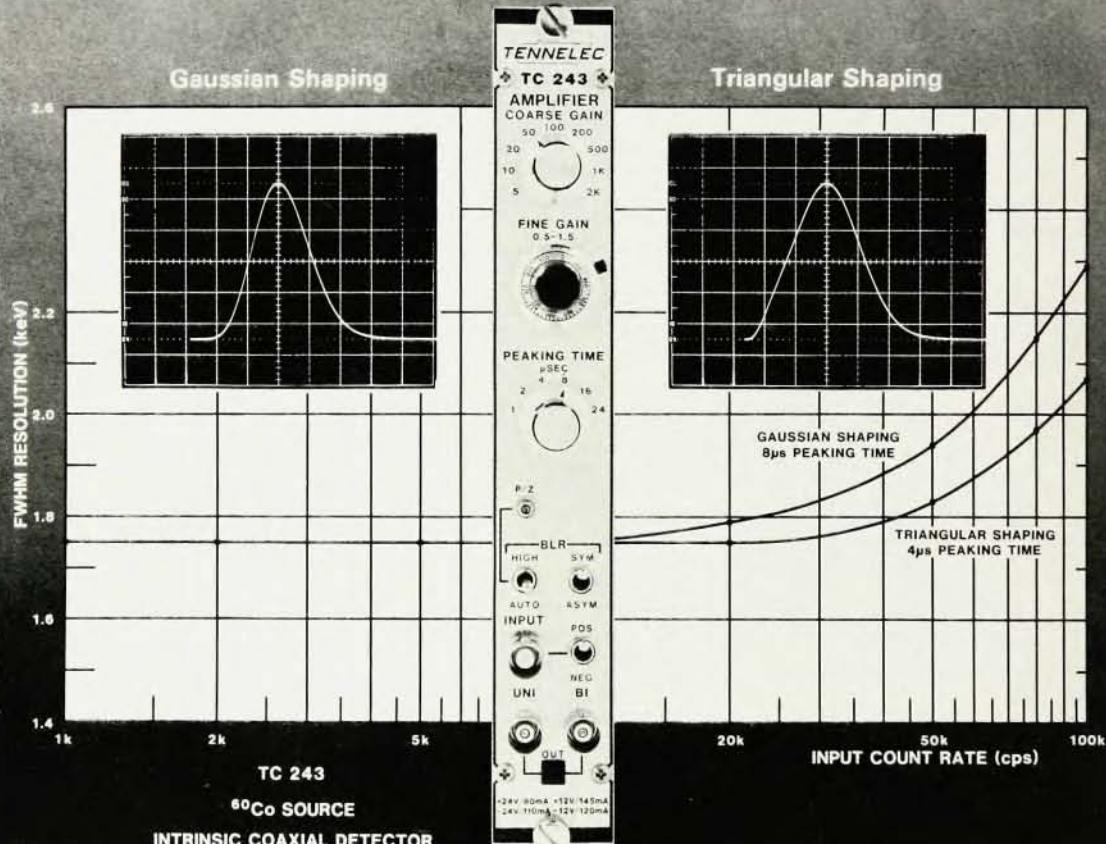
SEPTEMBER 1983

1-15 → **NATO Adv Study Inst on Progress in Gauge Field Theory** Cargese, Corsica, France (H. Lehmann, Inst. für Theoret. Physik, Univ. Hamburg, Luruper Chaussee 149, 2 Hamburg 50, FRG)

4-8 **6th Int Conf Erosion by Liquid and Solid Impact** Cambridge, UK 9/82

4-16 → **NATO Adv Study Inst on Density Functional Methods in Physics**

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Sinta, Estoril, Portugal (R. M. Dreizler, Inst. für Theoret. Physik, Univ. Frankfurt, Rubert-Mayer Strasse, 8-10, 6 Frankfurt/Main, FRG)

5-9 **Int Conf on Fourier Transform Spectroscopy** Durham, UK 9/82

5-9 **11th Eur Conf on Controlled Fusion and Plasma Phys** Aachen, FRG 9/82

5-9 **5th Int Conf on the Electronic Properties of Two-Dimensional Systems** Oxford, UK 1/83

5-9 **→ 1st Int Conf on Ethnoastronomy** Washington, DC (Ctr. for Archaeoastronomy, Univ. of MD, College Pk., MD 20742)

5-10 **→ 8th Iberamericano Cong of Crystallography** Buenos Aires and La Plata, Argentina (M. A. R. de Benyacar, Avda. del Libertador 8250, 1429 Buenos Aires, Argentina)

5-16 **→ NATO Adv Study Inst on Quarks, Leptons and Beyond** Munich, FRG (R. D. Peccei, Max-Planck Inst., für Physik und Astroph., Fohringer Ring 6, 8 München 40, FRG)

5-17 **→ 15th Int Summer School in Nuclear Phys** [Warsaw Univ. Inst. of Nuclear Res.] Mikolajki, Poland (K. Siwek-Wilczynska, Inst. of Expt. Phys., Warsaw Univ., 69 Hoza St., 00-681 Warsaw, Poland)

6-9 **2nd Int Conf on Lasers** Peking, China 9/82

6-9 **3rd Int Symp on Flow Visualization** Ann Arbor, MI 9/82

7-17 **Short Course on Mirror-Based and Field-Reversed Approaches to Magnetic Fusion** Varenna, Italy 9/82

12-14 **5th Int Conf on High-Power Particle Beams** San Francisco 7/82

12-14 **3rd Nat Conf on Synchrotron Radiation Instrumentation** Brookhaven Nat. Lab 1/83

12-14 **→ Int Conf on Computer-Aided Design** [IEEE] Santa Clara, CA (W. J. McCalla, Hewlett-Packard, 11000 Wolfe Rd., Cupertino, CA 95014)

12-16 **7th Int Conf on Crystal Growth** Stuttgart, FRG 9/81

12-16 **7th Symp on Ion Sources and Ion Assisted Tech and 4th Int Conf on Ion and Plasma Assisted Techniques** Kyoto, Japan 9/82

12-16 **→ Int Conf on the Dynamics of Interfaces** Lille, France (D. L. Mills, Dept. of Phys., Univ. of CA, Irvine, CA 92707)

12-16 **→ Symp on Atomic Spectroscopy** [NRC, NAS] Berkeley, CA (P. Little, B80C, LBL, Univ. of CA, Berkeley, CA 94720) [(415)486-6386])

13-16 **→ 13th Eur Solid State Device Res Conf** University of Kent, UK (C. Jones, IOP, 47 Belgrave Sq., London SW1 8QX UK)

13-16 **→ Short Course on Designing VLSI** Baltimore, MD (R. Dordick, Integrated Computer Sys., 3304 Pico Blvd., PO Box 5339, Santa Monica, CA 90405)

15-17 **→ Particles and Fields Div of APS** Blacksburg, VA (A. Abashian, Phys. Dept., VA Polytechnic Inst. and State Univ., Blacksburg, VA 24061)

16-20 **Phys of Plasma Close to Thermonuclear Conditions** Varenna, Italy 9/81

18-24 **→ 2nd Int Summer School on Processes of Thin Film Formation** [IUVSTA] Fonyod/by Lake Balaton (P. B. Barna, Chairman, Organizing Comm., Roland Eotvos Physical Society, 1368 Budapest, Anker Koz 1, P.O.B. 240, Hungary)

19-20 **→ Interfacial Phenomena in Partical Insulating Systems** [NBS, IEEE, DOE] Gaithersburg, MD (J. Sorrells, B162 Metrology Bldg., NBS, Washington, DC 20234 [(301)921-2727])

19-22 **3rd Top Mtg on Fusion Reactor Materials** Albuquerque, NM 11/82

19-22 **→ 6th Nat Quantum Electronics Conf** [IOP] Sussex Univ., UK (P. L. Knight, Optics, Blackett Lab., Imperial College, London, SW7 2BZ UK)

19-23 **→ Top Mtg on Free Electron Generation of Extreme Ultraviolet Coherent Radiation** Brookhaven, NY (OSA, 1816 Jefferson Pl., NW, Washington, DC 20036)

19-23 **Physical Chem of the Solid State: Applications to Metals and their Compounds** Paris 1/83

20-22 **→ Eur Conf and Exhibition on Sensors and Their Applications** [IOP] Manchester (Mtg. Officer, IOP, 47 Belgrave Sq., London SW1X 8QX, UK)

20-23 **→ Short Course on Designing VLSI** Los Angeles (R. Dordick, Integrated Computer Sys., 3304 Pico Blvd., PO Box 5339, Santa Monica, CA 90405)

25-29 **12th Ann North Am Thermal Analysis Soc Mtg** Williamsburg, VA 1/83

25-29 **• Symp on Thermal Behavior of Intercalate Materials** Pittsburgh (D. D. L. Chung, Dept. of Metallurgical Eng. and Materials Sci., Carnegie-Mellon Univ., 3325 Sci. Hall, Pittsburgh, PA 15213 [(412)578-2710])

25-30 **5th Eur Mtg on Ferroelectricity** Torremolinos, Spain 11/82

26-29 **→ 3rd Int Conf on Ultra-Relativistic Nucleus-Nucleus Collisions** [DOE] Brookhaven Nat. Lab. (R. Greenberg, Phys. Dept., Bldg. 510A, BNL, Upton, NY 11973 [(516)282-3743])

26-29 **→ Conf on Anticipated and Abnormal Plant Transients in Light Water Reactors** [ANS, DOE] Jackson, NY (G. F. Brockett, Intermountain Technologies, P. O. B. 1604, Idaho Falls, ID 83401 [(208)523-7255])

26-30 **9th Int Vacuum Cong—5th Int Conf on Solid Surfaces** Madrid, Spain 11/82

26-30 **1983 IEEE Int Symp on Information Theory** St. Jovite, Quebec, Canada 1/83

27-30 **7th Int Conf on Solid State Dosimetry** Ottawa, Canada 11/82

27-30 **→ Physical Chem of Colloid and Interfaces: Biotechnologies and Drug Res** [Société de Chimie Physique] Paris (C. Troyanowsky, Société de Chimie Physique, 10 rue Vauquelin, F75231 Paris Cedex 05, France)

27-29 **→ Workshop on Hadron and Jet Structure** DESY, Hamburg, FRG (K. Schilling, Fachbereich Physik, der Gesamthochschule Wuppertal, Gaubstr. 20, 5600 Wuppertal, FRG)

29-30 **→ First CAD/CAM and Simulation Conf** Boston (SCS, PO Box 2228,

La Jolla, CA 92038 [(619)459-3888])

30-1 **→ New York Sec of APS** Schenectady, NY (W. W. Havens Jr., 335 E. 45th St., New York, NY 10017 [(212)661-9404])

OCTOBER 1983

6-9 **→ Monopole '83** Ann Arbor, MI (J. Stone, Randall Lab. of Phys., Univ. of MI, Ann Arbor, MI 48109 [(313)764-0416])

7-9 **→ 5th Int Congress of Laser Medicine and Surgery** Detroit, MI (Reg. Supervisor, Fifth Int. Conf., C. B. Slack, 6900 Grove Rd., Thorofare, NJ 08086)

10-13 **3rd Top Mtg on Fusion Reactor Material** Albuquerque, NM 11/82

11-14 **→ 36th Gaseous Electronics Conf** Albany, NY (W. W. Havens Jr., 335 E. 45th St., New York, NY 10017 [(212)661-9404])

13-15 **APS Div of Nuclear Phys** Notre Dame, IN 11/82

16-20 **S of R Ann Mtg** Knoxville, TN 1/83

17-18 **→ 2nd Eur Conf on Integrated Optics** Firenze, Italy (G. C. Righini, IROE-CNR, Via Panciatichi 64, 50127 Firenze, Italy)

17-19 **→ Int Symp on Use and Development of Low and Medium Flux Research Reactors** [APS, IEEE, DOE, MIT] Cambridge, MA (O. K. Harling, Nuc. Reactor Lab., MIT, 138 Albany St., Cambridge, MA 02139 [(617)253-4201])

17-20 **• 15th Ann Mtg AAS Div for Planetary Sci** Ithaca, NY (J. A. Burns, Space Sciences Bldg., Cornell Univ., Ithaca, NY 14853 [(607)256-4935]) [8/15/83]

17-21 **OSA Ann Mtg** New Orleans, LA 11/82

17-21 **→ Scanning Electron Microscopy and X-ray Microanalysis: Theory and Practice—Materials Science** New Paltz, NY (A. V. Patsis, Chem. Dept., SUNY, New Paltz, NY 12561 [(914)257-2175])

18-20 **→ 4th Int Advanced Plasma Technology Conf and Seminar** Colorado Springs, CO (W. Becker, E. T. Electrotech, 40 Oser Ave., Hauppauge, NY 11788 [(516)231-3700])

20-22 **APS Div of Particles and Fields Mtg** Blacksburg, VA 11/82

21-22 **Eastern Theoretical Phys Conf** Brookhaven Nat. Lab. 11/82

23-26 **9th Eur Conf on Optical Communication** Geneva 11/82

23-26 **→ 7th Ann Symp on Computer Applications in Medical Care** Baltimore, MD (Cont. Med. Ed., George Washington Univ. Med. Ctr., 2300 K St., NW, Washington, DC 20037 [(202)676-4285])

24-25 **→ 16th Ann Synchrotron Radiation Users Group Mtg** Madison, WI (E. M. Rowe, Physical Sci. Lab., Univ. of WI-Madison, P.O. B. 6, Stoughton, WI 53589)

24-26 **→ AIP Corporate Associates Mtg** Palo Alto, CA (W. Koch, 335 E. 45 St., New York, NY 10017)

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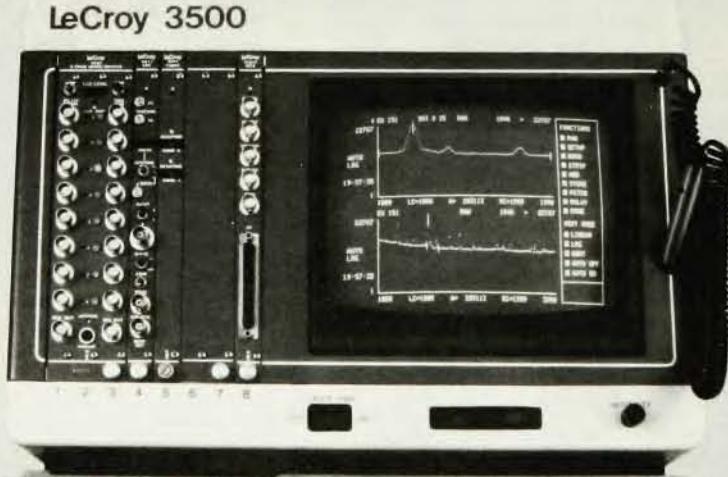
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24-26 **Int Symp on Electromagnetic Compatibility** Washington, DC 11/82

24-26 **Advanced Scanning Electron Microscopy and X-ray Microanalysis: Theory and Practice—Materials Science** New Paltz, NY (A. V. Patsis, Chem. Dept., SUNY, New Paltz, NY 12561 [(914)257-2175])

24-28 **Scanning Electron Microscopy and X-ray Microanalysis: Theory and Practice—Biology and Medicine** New Paltz, NY (A. V. Patsis, Chem. Dept., SUNY, New Paltz, NY 12561 [(914)257-2175])

27-28 **10th Ann Stanford Synchrotron Radiation Lab Users Group Mtg** SLAC (B. Patterson, Stanford Univ., SSLR/SLAC Bin 69, Stanford, CA 94035 [(415)853-3300 x 2095])

31-2 **1983 IEEE Ultrasonics Symp** [IEEE] Atlanta, GA (R. S. Kagiwada, TRW Electronic Systems Group, One Space Park, R6/1563, Redondo Beach, CA 90278 [(213)535-5515]) [7/1/83]

31-3 **Int Conf on VLSI in Computers** [IEEE] Port Chester, NY (H. W. Carter, 24 Long Street Lane, Wright-Patterson AFB, Ohio 45433 [(513)255-3576])

NOVEMBER 1983

1-4 **AVS Ann Mtg** Boston 11/82

3-5 **APS Southeastern Sec Mtg** Columbia, SC 11/82

7-11 **APS Plasma Physics Div** Los Angeles 11/82

7-11 **ASA 106th Mtg** San Diego 11/82

8-11 **29th Ann Conf on Magnetism and Magnetic Materials** [AIP/IEEE] Pittsburgh, PA (F. E. Werner, Westinghouse R & D Ctr., Pittsburgh, PA 15235) [7/5/83]

13-18 **AAPM Gen Mtg** Chicago

14-16 **15th Ann Symp on Optical Materials for High Power Lasers** [ASTM, DOE, NBS, AF Office of Sci. Res., Office of Naval Res.] Boulder, CO (S. Rivera, Electromagnetic Tech. Div., NBS, 325 Broadway, Boulder, CO 80303 [(303)497-5342]) [9/15/83]

14-17 **Ann Mtg of the Materials Research Soc** Boston (E. M. Hawk, 110 Materials Research Lab., University Park, PA 16802 [(814)865-3424])

14-17 **23rd Fall Symp of SPSE: Micro-imaging Tech** Crystal City, VA (R. Wood, SPSE, 7003 Kilworth Ln., Springfield, VA 22151 [(703)642-9090])

14-18 **3rd Int Symp on the Production and Neutralization of Negative Ions** Brookhaven Nat. Lab. (K. Prelec, Accelerator Dept., Brookhaven Lab., Upton, NY 11973 [(516)282-4777])

20-22 **APS Fluid Dynamics Div** Houston 11/82

20-23 **APS Gen Mtg** San Francisco 11/82

22-24 **3rd Int Conf on Quantitative Surface Analysis** [IOP, AVS, DPG] Middlesex, UK (C. Lea, Div. of Materials Applications, National Physical Lab., Teddington, Middlesex TW11 O1W, UK)

DECEMBER 1983

5-9 **10th Symp on Fusion Eng** Philadelphia 11/82

12-17 **8th Int Conf on Infrared and Millimeter Waves** Miami Beach, FL 1/83

JANUARY 1984

2-6 **1984 Winter Conf on Plasma Spectrochemistry** San Diego (R. M. Barnes, Dept. of Chem., GRC Towers, Univ. of MA, Amherst, MA 01003 [(413)545-2294]) [7/1/83]

8-11 **163rd Ann Mtg of AAS** Las Vegas, NV (P. Boyce, AAS, 1816 Jefferson Pl., NW, Washington, DC 20036)

23-25 **Top Mtg on Optical Fiber Communication** [OSA/IEEE] New Orleans, LA (OSA, 1816 Jefferson Pl. NW, Washington, DC 20036)

24-26 **1984 Ann Reliability and Maintainability Symp** San Francisco (N. H. Kutner, Westinghouse Electric Corp., Hendy Ave. (71-21), Sunnyvale, CA 94088)

30-2 **Joint APS/AAPT Mtg** San Antonio, TX (W. Havens Jr, 335 E. 45 St., New York, NY 10017)

MARCH 1984

5-7 **Top Mtg on Laser Techniques in the Extreme Ultraviolet** Boulder, CO (OSA, 1816 Jefferson Pl., NW, Washington, DC 20036)

21-28 **4th Int Symp on Heating in Toroidal Plasmas** Rome (M. Polidoro, ENEA Center, C.P. 65, 00044 Frascati, Italy)

22-24 **Conf on Defects in Amorphous Materials** Detroit, MI (W. W. Havens Jr, 335 E. 45th St., New York, NY 10017 [(212)661-9404])

26-30 **APS Gen Mtg** Detroit, MI (W. W. Havens Jr, 335 E. 45th St., New York, NY 10017 [(212)661-9404])

APRIL 1984

1-4 **Vacuum '84: Technological Aspects of Surface Treatment and Analysis** University of York, UK (J. S. Colligon, Dept. of Electronic and Electrical Eng., University of Salford, Salford M5 4WT UK)

2-6 **5th Int Conf on Nuclear Methods in Environmental and Energy Res** [ANS] Mayaguez, Puerto Rico (J. R. Vogt, Univ. of MO, 214 Research Reactor, Columbia, MO 65211 [(314)882-4211])

9-12 **3rd Int Conf on Mechanical Properties of Materials at High Rates of Strain** [IOP] Oxford, UK (J. Harding, Dept. of Eng. Sci., Parks Rd., Oxford, OX1 3PJ, UK)

10-12 **Conf on Lasers and Electro-optics** [OSA/IEEE] Anaheim, CA (OSA, 1816 Jefferson Pl. NW, Washington, DC 20036)

26-28 **APS Spring Mtg** Washington, DC (W. Havens Jr, 335 E. 45 St., New York, NY 10017)

29-2 **86th Ann Mtg and Expos Amer Ceramic Soc** Pittsburgh, PA (S. Robb, American Ceramic Soc., 65 Ceramic Dr., Columbus, OH 43214 [(614)268-8645])

MAY 1984

6-20 **Int School on Direct Methods of Solving Crystal Structures** Erice, Italy (L. Riva di Sanseverino, Inst. di Mineralogia, Piazza di Porta San Donato 1, 90127 Bologna, Italy)

7-11 **107th ASA Mtg** Norfolk, VA (B. Goodfriend, 335 E. 45 St., New York, NY 10017)

14-16 **IEEE Int Conf on Plasma Sci** [IEEE] St. Louis, MO (T. Menne, McDonnell Douglas Bldg. 81, Rm. 271, P. O. Box 516, St. Louis, MO 63166 [(314)576-8317])

21-25 **ACA Ann Spring Mtg** Lexington, KY (D. E. Sands, Dept. of Chemistry, Univ. of KY, Lexington, KY 40506)

28-30 **APS Electron and Atomic Div** Storrs, CT (W. W. Havens Jr, 335 E. 45 St., New York, NY 10017)

29 **AAAS Ann Mtg** New York (AAAS, 1776 Massachusetts Ave. NW, Washington, DC 20036)

JUNE 1984

10-13 **164th AAS Mtg** Baltimore, MD (AAS, 1816 Jefferson Pl., NW, Washington, DC 20036)

11-15 **7th Int Conf on Spectral Line Shapes** Meudon, France (F. Rosat-Daphe, Meudon Observ., F-92190, Meudon, France)

18-20 **1984 Physical Electronics Conf** Princeton, NJ (W. W. Havens Jr, 335 E. 45th St., New York, NY 10017 [(212)661-9404])

18-22 **OSA/IEEE Conf on Lasers and Electro-Optics and 13th Int Quantum Electronics Conf** Anaheim, CA (OSA, 1816 Jefferson Pl. NW, Washington, DC 20036)

JULY 1984

15-19 **Ann Mtg of AAPM** Chicago (E. Osterman, 335 E. 45th St., New York, NY 10017 [(212)661-9404])

15-19 **5th World Hydrogen Energy Conf** [Canadian Hydrogen Ass., Int. Ass. for Hydrogen Energy] Toronto (K. Charbonneau, 5th World Hydrogen Energy Conf., Nat. Res. Council of Canada, Ottawa, Ontario, Canada K1A OR6)

23-27 **4th Int Conf on Clustering Aspects of Nuclear Structure and Nuclear Reactions** Chester, UK (S. A. Lowndes, Sci. Eng. Research Council, Daresbury Lab., Daresbury, Warrington WA4 4AD, UK) □