

SEPTEMBER 1983

- 1-15 **NATO Adv Study Inst on Progress in Gauge Field Theory** Cargèse, Corsica, France 5/83
- 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** Sinta, Estoril, Portugal 5/83
- 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 5/83
- 5-10 **8th Iberoamericano Cong of Crystallography** Buenos Aires and La Plata, Argentina 5/83
- 5-16 **NATO Adv Study Inst on Quarks, Leptons and Beyond** Munich, FRG 5/83
- 5-17 **15th Int Summer School in Nuclear Phys** Mikolajki, Poland 5/83
- 5-17 **NATO Adv Study Inst on Phys and Chem of Electrons in Condensed Matter** Cambridge, UK 7/83
- 6-9 **2nd Int Conf on Lasers** Peking 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** Santa Clara, CA 5/83
- 12-14 **Conf and Exhibition on Modern Metallography in Metallurgy** University of Oxford, UK 7/83
- 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 5/83
- 12-16 **Symp on Atomic Spectroscopy** Berkeley, CA 5/83
- 12-16 **Statistical Methods in Astronomy** Strasbourg, France 7/83
- 12-16 **Course on Measurement of Laser Output Characteristics** Albuquerque, NM 7/83
- 13-16 **13th Eur Solid State Device Res Conf** University of Kent, UK 5/83
- 13-16 **Short Course on Designing VLSI** Baltimore, MD 5/83

- 15-17 **Particles and Fields Div of APS** Blacksburg, VA 5/83
- 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** Fonyod/Lake Balaton, Hungary 5/83
- 19-20 **Interfacial Phenomena in Particle Insulating Systems** Gaithersburg, MD 5/83
- 19-22 **3rd Top Mtg on Fusion Reactor Materials** Albuquerque, NM 11/82
- 19-22 **6th Nat Quantum Electronics Conf** Sussex Univ., UK 5/83
- 19-23 **Top Mtg on Free Electron Generation of Extreme Ultraviolet Coherent Radiation** Brookhaven Nat. Lab. 5/83
- 19-23 **Physical Chem of the Solid State: Applications to Metals and their Compounds** Paris 1/83
- 19-23 **Course on Introduction to Transmission Computed Tomography** Univ. of TX Health Sci. Ctr., San Antonio 7/83
- 20-22 **Eur Conf and Exhibition on Sensors and Their Applications** Manchester, UK 5/83
- 20-22 **Conf on Designing with High Temperature Materials** University of Sheffield, UK
- 20-22 **Conf on Impact of Computer Based Techniques on Plant Engineering Practice** Birmingham, UK 7/83
- 20-23 **Short Course on Designing VLSI** Los Angeles 5/83
- 21-23 **Course on High Energy Lasers—Fundamentals** Huntsville, AL 7/83
- 25-29 **12th Ann North Am Thermal Analysis Soc Mtg** Williamsburg, VA 1/83
- 25-29 **Symp on Thermal Behavior of Intercalate Materials** Pittsburgh, PA 5/83
- 25-30 **5th Eur Mtg on Ferroelectricity** Torremolinos, Spain 11/82
- 26-28 **Course on High Energy Lasers—Systems** Huntsville, AL 7/83
- 26-28 **8th Biennial Symp on Turbulence** University of MO-Rolla 7/83
- 26-29 **3rd Int Conf on Ultra-Relativistic Nucleus-Nucleus Collisions** Brookhaven Nat. Lab. 5/83
- 26-29 **Conf on Anticipated and Abnormal Plant Transients in Light Water Reactors** Jackson, NY 5/83
- 26-30 **9th Int Vacuum Cong—5th Int Conf on Solid Surfaces** Madrid, Spain 11/82

Please note: Complete information is only given in new (➔) or revised (●) listings. All other entries end with the date of the PHYSICS TODAY issue containing the following information: date title [sponsor] location (contact) [abstract deadline]

This calendar appears in alternate (odd-numbered) months. Notices should be sent to: Calendar, PHYSICS TODAY, 335 East 45th Street, New York, NY 10017 at least three months in advance.

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
BNL Brookhaven National Laboratory
CNRS Centre National de la Recherche Scientifique
DOE Department of Energy
DPG Deutsche Physikalische Gesellschaft
IAEA International Atomic Energy Agency

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

Physics and Mathematics

Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields

J. Guckenheimer and P. Holmes

Serving as a user's guide to new results in dynamical systems theory, this mathematically rigorous volume introduces geometrical methods in the study of differential equations and mappings which arise as models of physical problems. The book's scope ranges from invariant manifold and normal form methods of dynamic systems and symbolic dynamics, local and global bifurcation theory, to bifurcations of one- and multi-dimensional maps, chaos, and strange attractors.

1983/453 pp./206 illus./cloth \$32.00
(Applied Mathematical Sciences, Vol.42) ISBN 0-387-90819-6

Regular and Stochastic Motion

A.J. Lichtenberg and M.A. Lieberman

Using examples drawn from physics, astronomy, mechanical engineering, and fluid dynamics, this volume brings together the vast body of research literature exploring the calculation of stochastic motion in nonlinear oscillator systems. Applications-oriented, it describes current techniques for determining this motion in Hamiltonian systems, as well as dissipative systems and the effect of external noise. **REGULAR AND STOCHASTIC MOTION** then compares these calculations to computer simulation results further illustrating the various methods. Recent concepts

such as the phase structure of dynamical systems, the transition from regular to stochastic motion, and the description of intrinsically stochastic motion, are all explored in depth.

1982/499 pp. 140 illus./cloth \$36.00
(Applied Mathematical Sciences, Vol.38) ISBN 0-387-90707-6

The Lorenz Equations

Bifurcations, Chaos and Strange Attractors

Colin Sparrow

The research on Lorenz equations has progressed rapidly since the equations formulation in 1963, as applications in physics and engineering, as well as meteorology, have been developed. **THE LORENZ EQUATIONS** is the first book to provide a comprehensive survey of the behavior of solutions to Lorenz equations.

1982/269 pp./91 illus./paper \$19.80
(Applied Mathematical Sciences, Vol. 41) ISBN 0-387-90775-0

Elastic Media with Microstructure II **Three-Dimensional Models**

Isaak A. Kunin

Investigating the effects of elastic media on microstructure, inner degrees of freedom, and nonlocality, this second volume of **ELASTIC MEDIA WITH MICROSTRUCTURE** systematically explores the propagation of linear and nonlinear waves in dispersive media, static problems, and

the theory of local defects and dislocation.

1983/approx. 290 pp./20 illus./cloth \$39.50
(Springer Series in Solid-State Sciences, Vol.44) ISBN 0-387-12078-5

Advanced Synergetics

Instability Hierarchies of Self-Organizing Systems and Devices
H. Haken

Concentrating on examples in physics, chemistry, biology, electrical and mechanical engineering, as well as ecology and economics, **ADVANCED SYNERGETICS** explores this fascinating new area of research by developing theoretical concepts and mathematical tools to cope with the instabilities caused adjustments in external conditions. In doing so, the author in effect brings the reader to the forefront of modern synergetics research.

1983/approx. 450 pp./104 illus./cloth \$40.00
(Springer Series in Synergetics, Vol. 20) ISBN 0-387-12162-5

Inviscid Fluid Flows

H. Ockendon and A.B. Tayler

INVISCID FLUID FLOWS demonstrates the uses of mathematical modelling and analysis in fluid mechanics. Both the flow of inviscid fluids with the free boundaries and inviscid compressible flows are examined here.

1983/146 pp./45 illus./paper \$16.00
(Applied Mathematical Sciences, Vol.43) ISBN 0-387-90824-2

New Proceedings From SPRINGER-VERLAG

Surface Studies with Lasers

Proceedings of the First International Conference, Mauterndorf, Austria, March 9-11, 1983

Edited by **R. Aussenegg, A. Leitner, and M.E. Lippitsch**

1983/241 pp./146 illus./cloth \$26.00
(Springer Series in Chemical Physics, Vol. 33) ISBN 0-387-12598-1

Ion Formation from Organic Solids

Proceedings of the Second International Conference, Münster, FRG, September 7-9, 1982

Edited by **A. Benninghoven**

1983/269 pp./170 illus./cloth \$29.50
(Springer Series in Chemical Physics, Vol. 25) ISBN 0-387-12244-3

EXAFS and Near Edge Structures

Proceedings of the First International Conference, Frascati, Italy, September 13-17, 1982

Edited by **A. Bianconi, L. Incoccia, and S. Stipcich**

1983/420 pp./316 illus./cloth \$35.00
(Springer Series in Chemical Physics, Vol. 27) ISBN 0-387-12411-X

Ion Implantation: Equipment and Techniques

Proceedings of the Fourth International Conference on Ion Implantation, Berchtesgaden, FRG, September 13-17, 1982

Edited by **H. Rysse, and H. Glawischne**

1983/556 pp./474 illus./cloth \$39.00
(Springer Series in Electrophysics, Vol.11) ISBN 0-387-12491-8

Desorption Induced by Electron Transitions

Proceedings of the First International Workshop, Williamsburg, Virginia, May 12-14, 1982

Edited by **N.H. Tolk, et al.**

1983/269 pp./112 illus./cloth \$29.50
(Springer Series in Chemical Physics, Vol. 24) ISBN 0-387-12127-7



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- 26-30 **1983 IEEE Int Symp on Information Theory** St. Jovite, Quebec, Canada 1/83
- 26-30 **Conf on Recent Developments in Nonequilibrium Thermodynamics** Bellaterra, Spain 7/83
- 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** Paris 5/83
- 27-29 **Workshop on Hadron and Jet Structure** DESY, Hamburg, FRG 5/83
- 29-30 **First CAD/CAM and Simulation Conf** Boston 5/83
- 30-1 **New York Sec of APS** Schenectady, NY 5/83

OCTOBER 1983

- 2-5 **Ann Int Conf on Thermal Infrared Sensing for Diagnostics and Control** Oak Brook, IL 7/83
- 3-5 **18th Int Thermal Conductivity Conf** Rapid City, SD (T. Ashworth, Phys. Dept., SD School of Mines & Tech., Rapid City, SD 57701; 605-394-2361)
- 3-7 **Chapman Conf on Magnetic Reconnection** Los Alamos, NM 7/83
- 3-7 **Short Course on Aspects of Atmospheric Optics** Tullahoma, TN (J. Bernard, Univ. of TN Space Inst., Tullahoma, TN 37388; 615-455-0631 X276)
- 6-9 **Monopole '83 Ann Arbor, MI** 5/83
- 7-9 **5th Int Congress of Laser Medicine and Surgery** Detroit, MI 5/83
- 10-12 **Magnetic Spectrometer Workshop [SURA, NSF, DOE]** Williamsburg, VA (Magnetic Spectrometer Workshop, Dept. of Phys., College of William and Mary, Williamsburg, VA 23185; 804-253-4471)
- 10-12 **Short Course on Elements of Optical Design** San Antonio, TX (Ed. Dir., Laser Institute of Am., 5151 Monroe St., Toledo, OH 43623; 419-882-8706)
- 10-13 **Instrument Soc of Am Int Conf and Exhibit** Houston (ISA, 67 Alexander Dr., PO Box 12277, Res. Triangle Park, NC 27709; 919-549-8411)
- 11-14 **36th Gaseous Electronics Conf** Albany, NY 5/83
- 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 5/83
- 17-18 **11th Ann Midwest Solid-State Theory Symp** Cleveland, OH (B. Segall, Phys. Dept., Case Western Reserve Univ., OH 44106; 216-368-4031) [10/1/83]
- 17-19 **Int Symp on Use and Development of Low and Medium Flux Research Reactors** Cambridge, MA 5/83
- 17-20 **15th Ann Mtg AAS Div for Planetary Sci** Ithaca, NY 5/83

- 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 5/83
- 17-21 **Short Course on Laser Applications in Materials Processing** San Jose, CA (Ed. Dir., Laser Institute of Am., 5151 Monroe St., Toledo, OH 43623; 419-882-8706)
- 18-19 **SPS Programs at OSA Mtg** New Orleans, LA (D. Shea, 335 E. 45 St., New York, NY 10017; 516-349-7800)
- 18-20 **4th Int Advanced Plasma Technology Conf and Seminar** Colorado Springs, CO 5/83
- 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 5/83
- 24-25 **16th Ann Synchrotron Radiation Users Group Mtg** Madison, WI 5/83
- 24-25 **Int Symp on Phys and Chem of Porous Media** Ridgefield, CT (D. Johnson, Schlumberger-Doll Res., PO Box 307, Ridgefield, CT 06877)
- 24-26 **AIP Corporate Associates Mtg** Palo Alto, CA 5/83
- 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 5/83
- 24-27 **Specialists' Mtg on Yields and Decay Data of Fission Product Nuclides** Brookhaven Nat. Lab. 7/83
- 24-28 **Scanning Electron Microscopy and X-ray Microanalysis: Theory and Practice—Biology and Medicine** New Paltz, NY 5/83
- 24-28 **Short Course on Measurement of Laser Output Characteristics** Albuquerque, NM (Eng. Tech., PO Box 9000, Waco, TX 76710; 817-772-0082)
- 26-28 **Short Course on High Energy Laser Fundamentals** Las Cruces, NM (Eng. Tech., PO Box 9000, Waco, TX 76710; 817-772-0082)
- 27-28 **10th Ann Stanford Synchrotron Radiation Lab Users Group Mtg** SLAC 5/83
- 28-29 **Ann Fall Mtg Div of Atomic and Molecular Phys of CAP** Waterloo, Ontario (W. K. Liu, Dept. of Phys., Univ. of Waterloo, Waterloo, Ontario, N2L 3G1 Canada)
- 28-30 **Short Course on Laser Photoreduction: Bioeffects and Applications** Cincinnati, OH (Ed. Dir., Laser Inst. of Am., 5151 Monroe St., Toledo, OH 43623; 419-882-8706)
- 29-2 **OSA Ann Mtg** San Diego, CA (OSA, 1816 Jefferson Pl., NW Washington, DC 20036; 202-223-8130)
- 31-2 **1983 IEEE Ultrasonics Symp** Atlanta, GA 5/83

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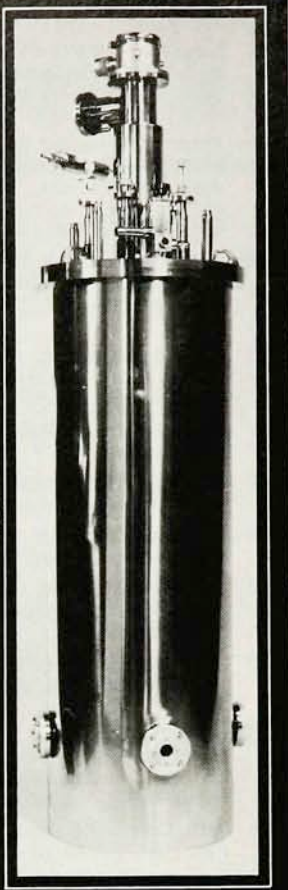
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31-3 Int Conf on VLSI in Computers
Port Chester, NY 5/83

NOVEMBER 1983

- 1-3 Copper '83 Conf London 7/83
- 1-3 → SPS Programs at AVS Mtg Boston (D. Shea, 335 E. 45th St., New York, NY 10017; 516-349-7800)
- 1-4 AVS Ann Mtg Boston 11/82
- 1-4 → Workshop on Moisture Measurement and Control for Semiconductor Devices III [RADC, NBS] Gaithersburg, MD (B. A. Moore, Rome Air Development Ctr., RBRE, Griffiss AFB, NY 13441; 315-330-4055)
- 3-5 APS Southeastern Sec Mtg Columbia, SC 11/82
- 4 → Interzone SPS Mtg (Zones 4,5,6) with SES-APS Columbia, SC (D. Shea, 335 E. 45 St., New York, NY 10017; 516-349-7800)
- 7-10 → Soc for Exp Stress Analysis Fall Mtg: Recent Advances in Experimental Characterization of Composites Salt Lake City, UT (K. Ramsey, SESA, 14 Fairfield Dr., Brookfield Ctr., CT 06805)
- 7-11 APS Plasma Physics Div Los Angeles 11/82
- 7-11 ASA 106th Mtg San Diego 11/82
- 7-11 3rd Int Conf on Heat Treatment of Materials Shanghai, China 7/83
- 7-11 Workshop on Problems of Collapse and Numerical Relativity [CNRS] Toulouse, France 7/83
- 7-11 → Short Course on Semiconductor Materials and Process Technologies Palo Alto, CA (Cont. Ed. Inst., 5410 Leaf Treader Way, Columbia, MD 21044)
- 8-11 29th Ann Conf on Magnetism and Magnetic Materials Pittsburgh, PA 5/83
- 8-11 → Short Course on Applications of Discrete and Continuous Fourier Analysis Arlington, VA (Cont. Ed. Inst., 5410 Leaf Treader Way, Columbia, MD 21044)
- 10-11 → ASSP Spectrum Estimation Workshop II Tampa, FL (A. R. Gondeck, Dept. of EE, Univ. of South FL, Tampa, FL 33620; 813-974-2581)
- 13-18 AAPM Gen Mtg Chicago 3/83
- 14-16 15th Ann Symp on Optical Materials for High Power Lasers Boulder, CO 5/83
- 14-17 Ann Mtg of the Materials Research Soc Boston 5/83
- 14-17 23rd Fall Symp of SPSE: Microimaging Tech Crystal City, VA 5/83
- 14-17 ICALEO Laser Conf '83 Los Angeles 7/83
- 14-18 3rd Int Symp on the Production and Neutralization of Negative Ions Brookhaven Nat. Lab. 5/83
- 14-18 Fossil Based Synfuels Symp Atlanta, GA 7/83
- 14-18 → Short Course on Laser Safety Washington, DC (Eng. Tech., PO Box 9000, Waco, TX 76714-9000; 817-772-0082)
- 14-18 → Short Course on Radioactive Waste Management Anaheim, CA

(Eng. Tech., PO Box 9000, Waco, TX 76714-9000; 817-772-0082)

- 15-25 **Course on Biol Effects and Dosimetry of Non-Ionizing Radiation: Static and ELF Electromagnetic Fields** Erice, Italy 7/83
- 20-22 **APS Fluid Dynamics Div** Houston 11/82
- 20-23 **APS Gen Mtg** San Francisco 11/82
- 21-23 **3rd Conf on Fractals: Fractals in the Physical Sciences** College Park, MD 7/83
- 22-24 **3rd Int Conf on Quantitative Surface Analysis** Middlesex, UK 5/83
- 27-2 **6th Int Conf on Non-Destructive Evaluation** Zürich, Switz. 7/83
- 28-2 **Short Course on Optical Interference Coating Technology** Los Angeles (P. Baumeister, PO Box 24901, Los Angeles, CA 90024; 213-825-1047)

DECEMBER 1983

- 5-9 **10th Symp on Fusion Eng** Philadelphia 11/82
- 5-10 **2nd Int Workshop on the Phys of Semiconductor Devices** Delhi, India 7/83
- 12-16 **6th Int Conf on Lasers & Applications** San Francisco 7/83
- 12-17 **8th Int Conf on Infrared and Millimeter Waves** Miami Beach, FL 1/83
- 14-16 **20th Ann Solid State Phys Conf** University of Oxford, UK (M. R. Wells, Clarendon Lab., Parks Rd., Oxford OX1 3PU UK)

JANUARY 1984

- 2-6 **1984 Winter Conf on Plasma Spectrochemistry** San Diego, CA 5/83
- 8-11 **163rd Ann Mtg of AAS** Las Vegas, NV 5/83
- 9-13 **Gordon Res Conf on Orientational Disorder in Crystals** Oxford, CA (C. W. Garland, 6-237, MIT, Cambridge, MA 02139)
- 9-20 **Optical Sci & Eng Short Course** Tucson, AZ (P. Slater, PO Box 18667, Tucson, AZ 85731; 602-885-3798)
- 23-25 **Top Mtg on Optical Fiber Communication** New Orleans, LA 5/83
- 24-26 **1984 Ann Reliability and Maintainability Symp** San Francisco 5/83
- 28-29 **Aspects of Medical Phys for Phys Teachers** San Antonio, TX 7/83
- 30-2 **Joint APS/AAPT Mtg** San Antonio, TX 5/83
- 31-2 **11th Ann Conf on Phys and Chem of Semiconductor Interfaces** Pinehurst, NC 7/83

FEBRUARY 1984

- 7-10 **Australia/New Zealand Condensed Matter Phys Mtg** [Austra-

lian and New Zealand Insts. of Phys.] Pakatua Island, Auckland, New Zealand (R. G. Buckley, Phys. and Eng. Lab., DSIR, Lower Hutt, New Zealand)

- 12-15 **Inter-Soc Color Council Williamsburg Conf on Color and Imaging** Williamsburg, VA (F. Billmeyer Jr., Dept. of Chem., Rensselaer Polytechnic Inst., Troy, NY 12181)
- 20-1 **23rd Int Universitätswochen für Kernphysik: Stochastic Methods and Computer Techniques in Quantum Dynamics** Schladming, Austria (L. Pittner, 23rd Int. Univ. Wochen, Inst. für Theoretische Physik, Universitätsplatz 5, A-8010 Graz)
- 27-29 **Spring Mtg of the Materials Res Soc** Albuquerque, NM (Gen. Sec., MRC, 110 Materials Res. Lab., University Park, PA 16802)
- 29-2 **Sem on the Application of Surface Analysis Methods to the Solution of Practical Problems** Boca Raton, FL (Dean, Div. of Cont. Ed., Florida Atlantic Univ., Boca Raton, FL 33431; 305-393-3090)

MARCH 1984

- 5-7 **Top Mtg on Laser Techniques in the Extreme Ultraviolet** Boulder, CO 5/83
- 5-8 **4th Top Workshop on Proton-Antiproton Collider Phys** Berne, Switz. (B. Hahn, High Energy Phys. Lab., Sidlerstr. 5, CH-3012 Berne, Switz.)
- 12-16 **5th Nordic Mtg on Nuclear Phys** Jyväskylä, Finland (H. Kalm, Dept. of Phys., Univ. of Jyväskylä, Seminaarinkatu 15, SF-40100 Jyväskylä 10, Finland)
- 21-28 **4th Int Symp on Heating in Toroidal Plasmas** Rome 5/83
- 22-24 **Conf on Defects in Amorphous Materials** Detroit, MI 5/83
- 26-30 **APS Gen Mtg** Detroit, MI 5/83

APRIL 1984

- 1-4 **Vacuum '84: Technological Aspects of Surface Treatment and Analysis** University of York, UK 5/83
- 2-6 **5th Int Conf on Nuclear Methods in Environmental and Energy Res** Mayaguez, Puerto Rico 5/83
- 6-8 **AVS Thin Film Div Top Symp on Sputtering** San Diego, CA 7/83
- 9-12 **3rd Int Conf on Mechanical Properties of Materials at High Rates of Strain** Oxford, UK 5/83
- 10-12 **Conf on Lasers and Electro-optics** Anaheim, CA 5/83
- 11-13 **Conf on Nuclear Structure Phys [IOP]** Univ. of Bradford (Mtg. Off., IOP, 47 Belgrave Sq., London SW1X 8QX UK)
- 12-14 **5th Workshop on Grand Unification** Providence, RI (K. Kang, Dept. of Phys., Brown Univ., Providence, RI 02912; 401-863-1471)
- 18-24 **OSA Spring Conf-Top Mtg on Optical Data Storage** Monterey, CA 7/83

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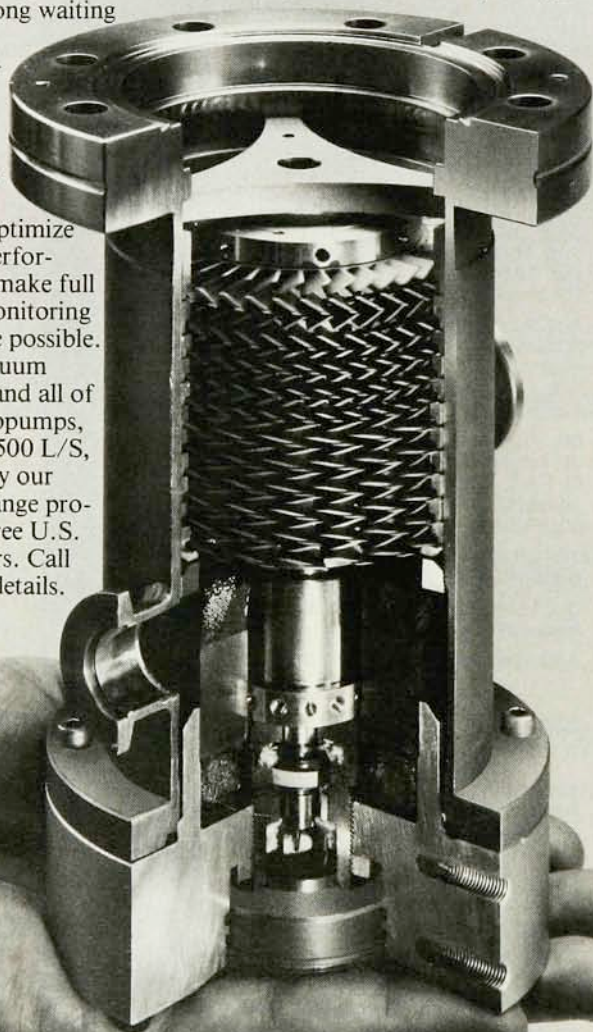
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23-26 • **APS Spring Mtg** Washington, DC
(W. Havens Jr, 335 E. 45 St., New York, NY 10017)

24-25 • **3rd Int Conf on III-V Semi-Insulating Materials** Warm Springs, OR
(W. Ford, Harris Microwave Semiconductor, 1530 McCarthy Blvd., Milpitas, CA 95035)

24-26 • **IEEE 1984 Nat Symp on Electromagnetic Compatibility** San Antonio, TX (W. McGinnis, Southwest Res. Inst., PO Drawer 28510, San Antonio, TX 78284)

29-2 **86th Ann Mtg and Expos Amer Ceramic Soc** Pittsburgh, PA 5/83

29-3 **4th Int Symp on Gaseous Dielectrics** Knoxville, TN 7/83

MAY 1984

6-20 **Int School on Direct Methods of Solving Crystal Structures** Erice, Italy 5/83

7-10 • **1984 IEEE Int Symp on Circuits and Systems** Montreal (M. N. S. Swamy, Dept. of Electrical Eng., Concordia Univ., 1455 De Maisonneuve Blvd. W., Montreal, PQ, Canada, H3G 1M8; 514-879-5926) [9/30/83]

7-11 **107th ASA Mtg** Norfolk, VA 5/83

14-16 **IEEE Int Conf on Plasma Sci** St. Louis, MO 3/83

21-25 **ACA Ann Spring Mtg** Lexington, KY 5/83

24-29 **AAAS Ann Mtg** New York 5/83

28-30 **APS Electron and Atomic Div** Storrs, CT 5/83

JUNE 1984

4-8 • **Int Symp on Phase Transitions in the Very Early Universe** Bielefeld, FRG (R. Baier, Fakultät für Physik, Univ. Bielefeld, Postfach 8640, D-4800 Bielefeld 1, FRG)

10-13 **164th AAS Mtg** Baltimore, MD 5/83

10-14 • **5th Int Congress on Experimental Mechanics** Montreal (K. Ramsay, Soc. for Exp. Stress Analysis, 14 Fairfield Dr., Brookfield Ctr., CT 06805)

11-15 • **7th Int Conf on Spectral Line Shapes [SFP, EPS]** Aussois, France (F. Rostas, Observatoire de Paris, 92195 Meudon Cedex, France)

12-15 **Top Mtg on Picosecond Phenomena** Monterey, CA 7/83

18-20 **1984 Physical Electronics Conf** Princeton, NJ 5/83

18-22 **OSA/IEEE Conf on Lasers and Electro-Optics and 13th Int Quantum Electronics Conf** Anaheim, CA 5/83

JULY 1984

2-4 **2nd Int Symp on Applications of Laser Anemometry to Fluid Mechanics** Lisbon, Portugal 7/83

2-6 • **1984 Nuclear EMP Mtg** Baltimore, MD (L. F. Libelo, L & L Assoc.,

9413 Bulls Run Pkwy., Bethesda, MD 20817)

7-10 → **4th Int Conf on Mechanics in Medicine and Biology** Buffalo, NY (G. Lee, Faculty of Eng. and Appl. Sci., SUNY, Buffalo, NY 14260; 716-636-2768)

9-13 → **7th Eur Symp on Antiproton Interactions** Durham, UK (M. R. Pennington, Phys., Dept., Univ. of Durham, Sci. Lab., Durham DH1 3LE, UK)

15-19 **5th World Hydrogen Energy Conf** Toronto 5/83

15-21 • **Ann Mtg of AAPM** Chicago (E. Osterman, 335 E. 45th St., New York, NY 10017 (212)661-9404)

22-28 **AAPM Summer School** South Bend, IN 7/83

23-27 **4th Int Conf on Clustering Aspects of Nuclear Structure and Nuclear Reactions** Chester, UK 5/83

24-27 **8th IEEE Int Conf on Conduction and Breakdown in Dielectric Liquids** Pavia, Italy 7/83

AUGUST 1984

1-4 **Top Conf on Optical Effects in Amorphous Semiconductors** Salt Lake City, UT 7/83

6-10 **Int Conf on the Phys of Semiconductors** San Francisco 7/83

9-18 **Int Union of Crystallographers 13th Cong** Hamburg, FRG 7/83

13-17 **6th Int Conf on Thin Films** Stockholm 7/83

13-18 **Int Conf on Luminescence** Madison, WI 7/83

15-22 → **17th Int Conf on Low Temperature Phys [IUPAP]** Karlsruhe, FRG (H. Hirsch, LT-17 Conf. Sec., Kernforschungszentrum, Postfach 3640, 7500 Karlsruhe, FRG)

20-24 **Conf on Precision Electromagnetic Measurements** Delft, The Netherlands 7/83

20-24 **5th Int Symp on Gas Flow and Chem Lasers** St. Catherine's College, Oxford, UK 7/83

20-24 → **Int Conf on Defects in Insulating Crystals** Salt Lake City, UT (F. Luty, Dept. of Phys., Univ. of Utah, Salt Lake City, UT 84112; 801-581-7446)

20-25 **Conf on Phys Education** Utrecht, The Netherlands 7/83

20-25 → **Int Conf on X-Ray and Inner-Shell Processes in Atoms, Molecules and Solids** Karl-Marx-Universität Leipzig, DDR (A. Meisel, Conf. Sec., Sektion Chemie der Karl-Marx-Universität, DDR-7010 Leipzig, Linnestrasse 2)

26-29 → **Int Top Mtg on Fuel Reprocessing and Waste Management [ANS Idaho Sec.]** Jackson Hole, WY (L. W. McClure, PO Box 3807, Idaho Falls, ID 83401) [1/1/84]

27-29 → **8th Int Colloquium on Extreme uv and x-ray Spectroscopy of Astrophysical & Laboratory Plasmas** [Naval Res. Lab., NASA] Washington, DC (R. W. Kreplin, Code 4175, Naval Res. Lab., Washington, DC 20375; 202-767-2603)

27-31 **5th Int Conf on Rapidly Quenched Metals** Würzburg, FRG 7/83

27-31 → **Symp on Transport Processes in Membranes and Epithelia: Osmotic and Ionic Regulation** Liege, Belgium (R. Gilles, 22, Quai Van Beneden, B-4020 Liege, Belgium)

28-7 **Int School of Plasma Phys—Plasma Astrophysics** Varenna, Italy 7/83

SEPTEMBER 1984

3-7 → **5th Int Conf on Rapidly Quenched Metals** Würzburg, FRG (RQ 5, Postfach 2253, D-6450 Hanau, FRG)

17-21 **9th Eur Conf on Thermophysical Properties** Manchester, UK 7/83

17-21 → **7th Int Conf on Textures of Materials** The Netherlands (Conf. Sec., PO Box 390, NL 3330 AJ Zwijndrecht, The Netherlands)

OCTOBER 1984

8-12 **108th ASA Mtg** Minneapolis, MN 7/83

8-13 **9th Int Congress on Rheology** Acapulco, Mex. (7/83)

9-12 **37th Gaseous Electronics Conf** Boulder, CO 7/83

18-20 **APS Nuclear Phys Div** Nashville, TN 7/83

21-26 → **5th Int Mtg on Radiation Processing** San Diego, CA (J. Silverman, PO Box 3060, Woburn, MA 01888)

27-3 **APS Plasma Phys Div** Boston 7/83

29-2 **OSA Ann Mtg** San Diego, CA 7/83

NOVEMBER 1984

18-20 → **APS Fluid Dynamics Mtg** Providence, RI (W. Havens Jr, 335 E. 45 St., New York, NY 10017)

25-30 → **Joint AAPM—Radiological Soc of N Amer Mtg** Washington, DC (E. Osterman, 335 E. 45 St., New York, NY 10017)

DECEMBER 1984

4-7 → **31st National Vacuum Symp** Reno, NV (N. Hammond, 335 E. 45th St., New York, NY 10017)

4-10 → **6th Int Conf on Fracture** New Delhi, India (K. N. Raju, Deputy Dir., National Aeronautical Lab., Bangalore-560017, India)

JANUARY 1985

20-24 → **APS/AAPT Gen Mtg** Toronto (W. Havens Jr, 335 E. 45th St., New York, NY 10017; 212-661-9404)

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