

MAY 1984

- 3-4 → **Elliott W. Montroll Memorial Conf** [IPST of Univ. of MD, ONR] Washington, DC (J. R. Dorfman, IPST, Univ. of MD, College Park, MD 20742; 301-454-2639)
- 6-10 **107th ASA Mtg** Norfolk, VA 11/83
- 6-20 **Int School on Direct Methods of Solving Crystal Structures** Erice, Italy 5/83
- 7-9 → **Course on Chemical Lasers** Las Cruces, NM (Engineering Technology, PO Box 8859, Waco, TX 76714; 817-772-0082)
- 7-9 → **Short Course on Radiometric & Photometric Measurements** San Francisco (Ed. Dir., Laser Institute of America, Ste. 118W, 5151 Monroe St., Toledo, OH 43623; 419-882-8706)
- 7-10 **1984 IEEE Int Symp on Circuits and Systems** Montreal 9/83
- 7-10 **30th Int Instrumentation Symp** Denver, CO 3/84
- 7-11 **Short Course on Fiber and Integrated Optics** Ottawa, Canada 3/84
- 7-11 **Short Course in Laser Applications in Manufacturing** Chicago, IL 3/84
- 7-18 **Short Course on Optical Sci & Engineering** Tuscon, AZ 3/84
- 8-10 **Laboratory Instrument and Equip**

- Conf and Exhibition** Long Beach, CA 3/84
- 8-11 **Symp on Recent Developments in Computing, Processor and Software Research for High Energy** Guanajuato, Mex. 1/84
- 14-16 **IEEE Int Conf on Plasma Sci** St. Louis, MO 3/83
- 14-18 **AVS Short Course Program** Arlington, VA 3/84
- 15-18 **Int Conf on Optics and Solar Energy** Czech. 1/84
- 17-19 → **Short Course on Phys, Chem, and Applications of Amorphous Semiconductors** Bloomfield Hills, MI (M. C. Steele, Inst. for Amorphous Studies, 1050 E. Square Lake Rd., Bloomfield Hills, MI 48013; 313-540-0102)
- 20-24 **37th Ann SPSE Conf** Boston, MA 3/84
- 20-2 → **Course on Foundations of Non-equilibrium Statistical Phys** Albuquerque, NM (G. T. Moore, Dept. of Phys. and Astron., Univ. of NM, Albuquerque, NM 87131; 505-277-3100)
- 21-23 **IEEE Custom Integrated Circuits Conf** Rochester, NY 11/83
- 21-25 **ACA Ann Spring Mtg** Lexington, KY 5/83
- 21-25 **13th Int Colloq on Group Theoretical Methods in Phys** College Park, MD 1/84
- 21-25 **Short Course on X-Ray Powder**

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]

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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

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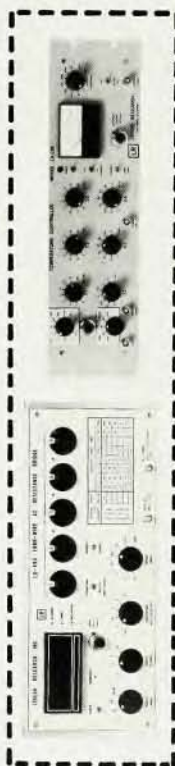
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- 21-25 → **Short Course on Adhesion Principles and Practice for Coating and Polymer Scientists** Kent, OH (K. Rylander, 327 Rockwell Hall, Kent State Univ., Kent, OH 44242; 216-672-3100)
- 21-25 → **Short Course on Holography—Principles and Applications** Lake Forest, IL (Ed. Dir., Laser Institute of America, 5151 Monroe St., Ste. 118W, Toledo, OH 43623; 419-882-8706)
- 23-24 → **Trends and Applications Conf** [IEEE, NBS] Gaithersburg, MD (H. Wood, A225, Technology Bldg., NBS, Washington, DC 20234; 301-921-3553)
- 23-30 → **Conf on the Intersections between Particle and Nuclear Phys** Steamboat Springs, CO (M. Heimerle, Bldg. 911B, BNL, Upton, NY 11973; 516-282-4776)
- 24-29 **AAAS Ann Mtg** New York 5/83
- 29-1 **1984 Int Symp on Electron, Ion and Photon Beams** Tarrytown, NY 1/84
- 30-1 **IEEE MTT-S Int Microwave Symp** San Francisco 1/84
- 30-1 **APS Div of Electron and Atomic Phys** Storrs, CT 1/84
- 30-1 **38th Ann Frequency Control Symp** Philadelphia 3/84
- 30-1 **Surface Canada 84: 10th Can Sem** Montreal 3/84
- 31-2 → **Workshop on Personal Computer and STD Computer Interfacing for Scientific Instrument Automation** Blacksburg, VA (L. Leftell, C.E.C., Virginia Tech, Blacksburg, VA 24061; 703-961-4848)

JUNE 1984

- 3-6 **Inter-Disciplinary Workshop on Structure and Properties of the Amorphous State** Williamsburg, VA 1/84
- 3-7 **9th Int Cong on Metallic Corrosion** Toronto, Can. 3/84
- 3-7 **ANS Ann Mtg** New Orleans, LA 3/84
- 3-16 → **Course on Frontiers of Nonequilibrium Statistical Phys** [Nato Advanced Study Institute] Santa Fe, NM (G. T. Moore, Dept. of Phys. and Astr., Univ. of NM, Albuquerque, NM 87139; 505-277-3100)
- 4-5 **Short Course on Techniques for Surface Analysis** Dayton, OH 1/84
- 4-5 **Ann Mtg and Conf of the Council for Optical Radiation Measurements** Gaithersburg, MD 3/84
- 4-7 **Int Symp on Polymer Alloys: Structure and Properties** Brugge, Belgium 3/84
- 4-7 → **Short Course on Fundamentals of Conventional and Laser Spectroscopy** Boston, MA (Ed. Dir., Laser Institute of America, 5151 Monroe St., Ste. 118W, Toledo, OH 43623; 419-882-8706)
- 4-8 **Int Symp on Phase Transitions in the Early Universe** Bielefeld, FRG 9/83
- 4-8 → **Practical Lens Design: Lectures and Computing Laboratory** Roch-

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Appendix I

- Number of Institutions by Type of Highest Physics Program Offered and Number of Physics Faculty by Rank
- Number of Institutions by Type of Highest Astronomy Program Offered and Number of Astronomy Faculty by Rank

Appendix II

Institutions by Highest Physics Program and Total Number of Physics Faculty

- United States
- Canada
- Mexico
- Central America

Appendix III

Institutions by Highest Astronomy Program and Total Number of Astronomy Faculty

- United States
- Canada
- Mexico
- Central America

Appendix IV

Number of U.S. Institutions by State, Type of Institution & Source of Support

Appendix V

- U.S. Institutions Which Granted the Largest Number of Physics Doctorates in 1978-79
- U.S. Institutions Which Granted the Largest Number of Physics Baccalaureates in 1978-79
- U.S. Institutions Which Granted the Largest Number of Astronomy Doctorates in 1978-79
- U.S. Institutions Which Granted the Largest Number of Astronomy Baccalaureates in 1978-79

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- 4-11 **15th GIFT Sem on Supersymmetry, Supergravity and Related Topics** Costa Brava, Spain 3/84
- 4-29 **Theoretical Advanced Study Institute in Elementary Particle Phys** Ann Arbor, MI 3/84
- 5-7 **Dynamics Days—Twente: Workshop on Nonlinear Dynamics and Chaotic Behavior** Enschede, The Netherlands 11/83
- 5-8 **15th Ann Mtg of Can Astronomical Soc** Ottawa, Ontario 3/84
- 6-8 **6th Symp on Applied Analysis** Dayton, OH 1/84
- 6-19 **24th Cracow School of Theoretical Phys** Zakopane, Poland 3/84
- 7-8 **Muon-Catalyzed Fusion Workshop** Jackson, WY 1/84
- 10-12 **96th Sci Mtg of the Astronomical Society of the Pacific** Santa Cruz, CA 1/84
- 10-13 **164th AAS Mtg** Baltimore, MD 5/83
- 10-14 **5th Int Cong on Experimental Mechanics** Montreal 9/83
- 11-13 **Symp on Specialty Materials and Refractory Metal Alloy Melting and Processing** Pittsburgh, PA 3/84
- 11-15 **7th Int Conf on Spectral Line Shapes** Aussois, France 9/83
- 11-15 **Short Course on Fiber and Integrated Optics** Teaneck, NJ 3/84
- 11-15 → **Conf on Chem & Phys of Isotopes** Meriden, NH (A. M. Cruickshank, Gordon Research Conf., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 11-15 → **Conf on Physical Organic Chem** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Conf., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 11-15 → **Conf. on UV/Visible Multiphotons & Dissociation Processes** New London, NH (A. M. Cruickshank, Gordon Research Conf., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 12-14 **10th Int Symp on Machine Processing of Remotely Sensed Data: Thematic Mapper Data and Geographic Information Systems** West Lafayette, IN 1/84
- 12-15 **Top Mtg on Ultrafast Phenomena** Monterey, CA 7/83
- 12-15 → **Summer Course on Thin Film Crystalline and Amorphous Silicon** Heverlee, Belgium (H. Maes, Kard. Mercierlaan 94, B-3030 Heverlee, Belgium)
- 13-15 **Conf on Tunable Solid-State Lasers** La Jolla, CA 3/84
- 13-15 → **Int Conf on Fusion Reactions Below the Coulomb Barrier** Cambridge, MA (R. J. Ledoux, Rm 26-413, MIT, Cambridge, MA 02139; 617-253-4184)
- 14-15 → **National New Technology Telescope Mtg** Baltimore (G. Burbidge, Kitt Peak Nat. Obs., POB 26732, Tucson, AZ 85726; 602-325-9281)
- 17-29 **2nd Ann MIT/Harvard Summer Program on Nuclear Weapons**

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and Arms Control Cambridge, MA 3/84

- 18-19 **Advances in Computational Methods for Boundary and Interior Layers** Dublin, Ireland 1/84
- 18-20 **1984 Physical Electronics Conf** Princeton, NJ 5/83
- 18-20 **16th Power Modulator Symp** Arlington, VA 3/84
- 18-21 **1984 Cong of Canadian Assoc of Physicists** Sherbrooke, Qué. 11/83
- 18-21 **OSA/IEEE/APS 13th Int Quantum Electronics Conf** Anaheim, CA 3/84
- 18-21 **IAU Symp 112 on Search for Extraterrestrial Life—Recent Developments** Boston, MA (M. D. Pappagannis, Dept. of Astr., Boston Univ., Boston, MA 02215; 617-353-2626)
- 18-21 **IEEE Power Electronics Specialists Conf** Gaithersburg, MD (S. B. Kelley, Bldg. 225, Rm. B344, NBS, Washington, DC 20234; 301-921-3541)
- 18-22 **Summer Conf on Infrared Technology Fundamentals and System Applications** Ann Arbor, MI (Engineering Summer Confs., Chrysler Center, North Campus, Ann Arbor, MI 48109; 313-764-8490)
- 18-23 **Course: From Nuclei to Stars** Varenna, Italy (A. Molinari, Ist. di Fisica Teorica dell'Univ., Corso M. D'Azeglio 46, 10125 Torino, Italy)
- 18-29 **6th Nuffic Summerschool on Fundamental Problems in Statistical Mechanics** The Hague 3/84
- 19-21 **Inst of Environmental Scis Nat Conf and Workshop on Tailoring Environmental Standards to Control Contract Requirements** Leesburg, VA (IES, 940 E. Northwest Highway, Mount Prospect, IL 60056; 312-255-1561)
- 19-22 **OSA/IEEE Conf on Lasers and Electro-Optics** Anaheim, CA 5/83
- 20-21 **Conf on Mass Loss From Red Giants** Los Angeles, CA (M. Morris, Astronomy Dept., Univ. of CA, Los Angeles, CA 90024; 213-825-3320)
- 20-22 **3rd Int Conf on Boundary and Interior Layers: Computational and Asymptotic Methods** Dublin, Ireland 1/84
- 21-23 **42nd Ann Device Res Conf** Santa Barbara, CA (L. Tomasetta, Rockwell International, PO Box 1085, Thousand Oaks, CA 91360; 805-498-4545)
- 24-28 **9th Int CODATA Conf** Jerusalem 1/84
- 25-27 **Conf on the Frontiers of Large-scale Computational Problems** Gaithersburg, MD (H. Raveche, A311 Phys. Bldg., NBS, Washington, DC 20234; 301-921-2443)
- 25-27 **Flow Visualization Techniques: Principles and Applications Conf** Ann Arbor, MI (Engineering Summer Confs., Chrysler Center, North Campus, Ann Arbor, MI 48109; 313-764-8490)
- 25-29 **AAPT Mtg** College Park, MD 11/83
- 25-29 **Summer Workshop on Continuous Electron Beam Accelerator Facility** Newport News, VA (F. Cross, CEBAF Site, 12070 Jeffer-

son Ave., Newport News, VA 23606; 804-877-9231)

- 25-29 **Summer Program on Optical Signal Processing** Troy, NY (Office of Continuing Studies, Rensselaer Polytechnic Inst., Troy, NY 12181; 518-266-6442)
- 25-29 **Summer Course on Advanced Infrared Technology** Ann Arbor, MI (Engineering Summer Confs., Chrysler Center, North Campus, Ann Arbor, MI 48109; 313-764-8490)
- 25-29 **Course on Measurement of Laser Output Characteristics** Las Vegas, NV (Engineering Technology, PO Box 8859, Waco, TX 76714; 817-772-0082)
- 25-29 **Conf on Res at High Pressure** Meriden, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 25-7 **25th COSPAR Mtg** Graz, Austria 1/84
- 26-27 **Short Course on Biological Effects and Dosimetry in Diagnostic X-Ray and Nuclear Medicine** San Antonio, TX 1/84
- 26-30 **X-ray Astronomy Symp** Bologna, Italy (G. Clark, Dept. of Phys., MIT, Cambridge, MA 02139)
- 26-6 **Course on Elementary Particles** Varenna, Italy (N. Cabibbo, Ist. Nazionale di Fisica Nucleare, Piazza dei Caprettari 70, 00186 Roma, Italy)
- 27-29 **Trieste Int Symp on Surface Spectroscopy of Adsorbates** Trieste, Italy 3/84

JULY 1984

- 2-4 **2nd Int Symp on Applications of Laser Anemometry to Fluid Mechanics** Lisbon, Portugal 7/83
- 2-5 **Conf on the Phys of Highly Ionised Atoms** Oxford, UK (J. D. Silver, Clarendon Lab., Parks Road, Oxford OX1 3PU, UK) [5/1/84]
- 2-6 **1984 Nuclear EMP Mtg** Baltimore, MD 9/83
- 2-6 **3rd Trieste IUPAP Semiconductor Symp: High Excitation and Short Pulse Phenomena** Trieste, Italy 1/84
- 2-6 **Conf on Theoretical Biology & Biomath** New London, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 2-13 **Applied Optics Summer Course** London 3/84
- 3-6 **Int Conf on Crystal Growth and Characterization of Polytype Structures** Marseilles, France 1/84
- 5-6 **2nd Symp on Plasma Double Layers and Related Topics** Innsbruck, Austria 3/84
- 7-12 **96th Sci Mtg of Astronomical Soc of the Pacific** Santa Cruz, CA 3/84
- 8-11 **4th Int Conf on Mechanics in Medicine and Biology** Buffalo, NY 9/83
- 8-13 **Ann Review of Progress in Quantitative Nondestructive Evaluation** San Diego, CA 3/84

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- E. Catalysis by Solids: Bulk Properties, Surface Properties, and Defects
- F. Plasma Synthesis and Etching of Electronic Materials
- G. High Temperature Ordered Intermetallic Alloys
- H. Hydrogen in Metals: Physics, Metallurgy, and Engineering Approaches
- I. Intercalated Graphite
- J. The Potential for Very High Strength Cement-Based Materials
- K. Advanced Techniques for the Characterization of Defects in Solids
- L. Electronic Packaging Materials Science
- M. Coal Combustion and Conversion Wastes: Characterization, Utilization, and Disposal
- N. Scientific Basis for Nuclear Waste Management
- O. Alloy Phase Diagrams
- P. Fractal Aspects of Materials: Metal Catalyst Surfaces, Powders and Aggregates
- X. Frontiers in Materials Science (invited papers only)

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- *Modern Analytical Techniques in Corrosion Research

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- 8-21 **1984 Summer Sem in Applied Mathematics** Sante Fe, NM 1/84
- 9-12 **IAU Colloq Properties and Interactions of Interplanetary Dust** Marseille, France 1/84
- 9-13 **7th Eur Symp on Antiproton Interactions** Durham, UK 9/83
- 9-13 **Int Conf on the Effects of Modes of Formation on the Structure of Glasses** Nashville, TN 11/83
- 9-13 **Short Course on Fiber and Integrated Optics** San Diego, CA 3/84
- 9-13 **UV and X-Ray Emission from Active Galactic Nuclei** Garching, FRG 3/84
- 9-13 → **Course on Laser Fundamentals and Systems** Washington, DC (Engineering Technology, PO Box 8859, Waco, TX 76714; 817-772-0082)
- 9-13 → **Plasma Processing for Microelectronic Fabrication** Cambridge, MA (Dir. of Summer Session, MIT, Rm. E19-356, Cambridge, MA 02139)
- 9-13 → **3rd Int Symp on Small Particles and Inorganic Clusters** Berlin (J. Koutecky, Freie Univ. Berlin, D-1000 Berlin 33, FRG)
- 9-13 → **Conf on Lasers in Medicine & Bio** Meriden, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 9-13 → **Conf on Nuclear Structure Phys** Tilton, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 9-13 → **Conf on Particle-Solid Interactions** Plymouth, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 9-13 → **Conf on Chem and Phys of Microstructure Fabrication** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 9-14 **Short Course in Design and Analysis of Scientific Experiments** Cambridge, MA 3/84
- 9-20 → **Summer Session on Lasers and Optics for Applications** Cambridge, MA (Dir. of the Summer Session, Rm. E19-356 MIT, Cambridge, MA 02139)
- 9-3 → **Summer Workshop in Condensed Matter Res** Houghton, MI (R. O. Keeling, Dept. of Phys., Michigan Tech. Univ., Houghton, MI 49931)
- 10-20 → **Course on Frontiers in Physical Acoustics** Varenna, Italy (D. Sette, Dip. di Energetica, Univ. "La Sapienza," Via A. Scarpi 14, 00161, Roma, Italy)
- 15-19 **5th World Hydrogen Energy Conf** Toronto 5/83
- 15-19 → **1st Inter-Am Mtg on Medical Phys** Chicago, IL (J. M. Galvin, Dept. of Radiation Therapy, Hospital of the Univ. of PA., 3400 Spruce St., Philadelphia, PA 19104)
- 15-21 **Ann Mtg of AAPM** Chicago 9/83
- 15-28 **NATO Advanced Study Inst on Electronic Structure, Dynamics and Quantum Structural Properties** Antwerpen, Belgium 3/84
- 16-20 **3rd Int Conf on EXAFS** Stanford Synchrotron Radiation Lab Stanford, CA 1/84

16-20 **Int Cont on Ion Beam Modification of Materials** Ithaca, NY 1/84

16-20 **36th Symp on Light and Electron Microscopy** Chicago, IL (N. Daerr, McCrone Res. Inst., 2508 S. Michigan, Chicago, IL 60616; 312-842-7105)

16-20 **Conf on Polymer Phys** Andover, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

16-20 **Conf on Electron Spectroscopy** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

16-20 **Conf on Photonuclear Reactions** Plymouth, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

16-27 **Course on Optical Metrology** Vianna Do Castelo, Portugal (O. D. Soares, Lab. de Fisica, Faculdade de Ciencias, Univ. do Porto, 4000 Porto-Portugal)

16-3 **Nonlinear Phenomena in Phys** Santiago, Chile 3/84

17-27 **10th Int School on Disarmament and Research on Conflicts** Venice, Italy 1/84

22-25 **Short Course and Conf on Radiation Effects** Colorado Springs, CO (B. D. Shafer, Sandia National Labs., Albuquerque, NM 87185; 505-846-0629)

22-28 **AAPM Summer School: Recent Developments in Digital Imaging** South Bend, IN 7/83

23-25 **1984 Summer Computer Simulation Conf** Boston, MA 11/83

23-25 **21st Ann Conf on Nuclear and Space Radiation Effects** Colorado Springs, CO (B. D. Shafer, Sandia National Labs., Albuquerque, NM 87185; 505-846-0629)

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

23-27 **3rd Int Conf on Infrared Phys** Zurich 1/84

23-27 **Short Course on Applied Molecular Spectroscopy: Infrared** Tempe, AZ 3/84

23-27 **Summer Conf on Synthetic Aperture Radar Technology and Applications** Ann Arbor, MI (Engineering Summer Confs., Chrysler Center, North Campus, Ann Arbor, MI 48109; 313-764-8490)

23-3 **1984 SLAC Summer Inst on Particle Phys** Stanford, CA 1/84

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

24-3 **Course on Theory of Reliability** Varenna, Italy (A. Serra, ENEA-TIB/ISP, CRE, Casaccia, S. P. Anguillarese 301, 00100 Roma, Italy)

28-11 **NATO Advanced Study Institute on Improved Methods for Examining the Submicron World** Nova Scotia, Canada (D. M. Shinozaki, Faculty of Engineering Sci., Univ. of Western Ontario, London, Canada N6A 5B9; 516-679-3205)

29-3 **Ann Mtg of the National Conf on Weights and Measures** Boston,

MA (A. Heffernan, Phys. Bldg., Room A355, NBS, Washington, DC 20234; 301-921-3677)

29-4 **8th Int Biophysics Cong** Bristol, UK 1/84

30-1 **Workshop on the Use of Supercomputers in Theoretical Science** Antwerp, Belgium (J. T. Devreese, Dept. of Phys., Univ. of Antwerp, Universiteitsplein 1, 2610 Wilrijk, Antwerp, Belgium)

30-2 **10th Int Conf on Particles and Nuclei** Heidelberg, FRG (Conf. Sec. PANIC 84, Physikalisches Inst. der Univ. Heidelberg, Philosophenweg 12, 6900 Heidelberg, FRG)

30-3 **Conf on Studies in Solid State Ceramics** New London, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

30-3 **Conf on Modeling of Flow in Permeable Media** Andover, NH (A. M. Cruickshank, Gordon Res. Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

30-3 **Optical Propagation, Detection, and Communication** Cambridge, MA 3/84

30-3 **Conf on Dielectric Phenomena** Plymouth, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

30-3 **Conf on Atomic & Molecular Interactions** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

30-10 **Short Course on the Phys of Plasma Wall Interaction Processes in Controlled Fusion** Val-Morin, Quebec, Can. 3/84

AUGUST 1984

1-3 **The Phys of VLSI** Palo Alto, CA 1/84

1-3 **2nd Workshop on Hadronic Mechanics** Villa Olma, Como, Italy 3/84

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

1-4 **3rd Int Conf on Molecular Beam Epitaxy** San Francisco 3/84

1-7 **Les Houches 43: Critical Phenomena, Random Systems, Gauge Theories** Les Houches, France 1/84

2-13 **Advanced Study Inst on Techniques and Concepts of High Energy Phys** St. Croix, US Virgin Islands 11/83

4-14 **27th Int Geological Cong** Moscow 1/84

5-8 **4th Workshop on Maximum Entropy and Bayesian Methods in Applied Statistics: Maximum Entropy Methods in Inversion** Calgary, Alberta, Canada (E. Cockburn, Dept. of Geology and Geophys., Earth Science 218, 2500 Univ. Dr.,

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NW, Calgary, Alberta, Canada T2N 1N4; 403-284-6609)

5-9 **NMR Symp** Denver, CO 3/84

5-9 **7th Int EPR Symp** Denver, CO 3/84

5-10 **Space Shuttle Experiment and Environment Workshop** Henniker, NH (Engineering Foundation, 345 E. 47 St., New York, NY 10017; 212-705-7835)

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

6-10 **Summer Program on Industrial Rheology: Principles and Practice** Cambridge, MA (C. Rha, Room 56-137, Biomaterials Sci. and Eng. Lab., MIT, Cambridge, MA 02139)

6-10 **Course on Non-Ionizing Radiations: Biophys and Biological Basis, Applications, and Hazards in Medicine and Industry** Cambridge, MA (Dir. of Summer Sessions, Room E19-356, MIT, Cambridge, MA 02139)

6-10 **Conf on Chem & Phys of Water & Aqueous Solutions** New Hampton, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

6-10 **Conf on Magnetic Resonance in Medicine & Bio** Tilton, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)

6-17 **NATO Adv Study Inst: Stability of the Solar System and Its Minor Natural Artificial Bodies** Austin, TX 1/84

6-17 **Modern Industrial Spectroscopy** Tempe, AZ 3/84

7-10 **9th IEEE Int Semiconductor Laser Conf** Rio de Janeiro, Brazil 3/84

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

12-17 **2nd Int Symp on Diffuse Reflectance Spectroscopy** Chambersburg, PA (P. Williams, Grain Res. Lab., 1404-303 Main St., Winnipeg, Manitoba, Canada R3C 3G8; 204-949-3344)

12-17 **13th Int Conf on Defects in Semiconductors** Coronado, CA (J. L. Benton, AT&T Bell Labs., Murray Hill, NJ 07974; 201-582-3643)

12-1 **Summer School in High Energy Phys: Fundamental Forces** St. Andrews, Scotland 3/84

12-17 **Mtg of the Electron Microscopy Soc of America** Detroit 1/84

13-14 **Top Mtg on Industrial Applications of Computer Tomography and NMR Imaging** Manitoba, Can. 1/84

13-16 **1st Int Conf on the Structure of Surfaces** Berkeley, CA 11/83

13-16 **Int Conf on Superlattices, Microstructures and Microdevices** Champaign-Urbana, IL 1/84

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

13-17 **Int Conf on Luminescence** Madison, WI 7/83

13-17 **12th Int Laser Radar Conf** Aix-en-Provence, France 1/84

13-17 **IUPAC Conf on Chem Thermodynamics/39th Ann Calorimetry Conf** Hamilton, Ontario 1/84

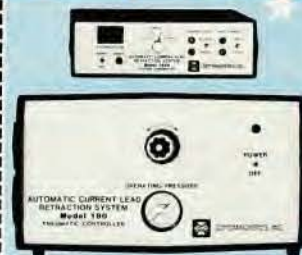
- 13-17 → **Short Course on Fiber Optic Communication Systems** Santa Barbara, CA (Dept. of Sci. & Management, UCSB Extension, Santa Barbara, CA 93106; 805-961-3697)
- 13-17 → **Conf on Dynamics of Simple Systems in Chem & Phys** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 13-17 → **Conf on Electron Donor Acceptor Interactions** Plymouth, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 13-18 **8th Eur Cong on Electron Microscopy** Budapest, Hungary 1/84
- 13-24 → **Summer School on High-Energy Particle Accelerators** Batavia, IL (DOE, NSF, Fermilab) (M. Paul, School Secretary, MS 306, PO Box 500, Fermilab, Batavia IL 60510)
- 15-17 **1984 Int Conf on Information Processing in Optics** Christchurch, New Zealand 1/84
- 15-17 **Int Conf on Progress in Optical Physics** Melbourne, Australia 1/84
- 15-22 **17th Int Conf on Low Temperature Phys** Karlsruhe, FRG 9/83
- 19-24 → **SPIE 28th Ann Int Tech Symp on Optics and Electro-Optics and Instrument Display** San Diego, CA (SPIE, PO Box 10, Bellingham, WA 98227)
- 20-23 → **Conf on Thinking** Cambridge [Harvard Grad. School of Ed., Univ. of MA, Univ. of the S. Pacific] (Comm. for Conf. on Thinking, Gutman Library, Grad. School of Ed., Harvard Univ., Cambridge, MA 02138)
- 20-24 **Conf on Precision Electromagnetic Measurements** Delft, The Netherlands 7/83
- 20-24 **5th Int Symp on Gas Flow and Chem Lasers** Oxford, UK 7/83
- 20-24 **Int Conf on Defects in Insulating Crystals** Salt Lake City, UT 9/83
- 20-24 **13th Conf of the Int Comm for Optics** Sapporo, Japan 1/84
- 20-24 **7th IUPAC Conf on Phys Organic Chem** Auckland, New Zealand 1/84
- 20-24 **Int Symp on Synthetic Membranes** Midland, MI 3/84
- 20-24 → **Short Course on Detection of Infrared Radiation** Santa Barbara, CA (Dept. of Sci. and Management, UCSB Extension, Santa Barbara, CA 93106; 805-961-3697)
- 20-24 → **Conf on Vibrational Spectroscopy** Wolfeboro, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 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** Leipzig, GDR 9/83
- 20-25 → **13th Int Conf on Differential Geometric Methods in Theoretical Physics** Shumen, Bulgaria (B. Markowski, Inst. for Nuclear Research and Nuclear Energy, 1184 Sofia, Bulgaria)
- 21-24 **Phys in Collision IV** Santa Cruz, CA 1/84
- 26-29 **Int Top Mtg on Fuel Reprocess-**

- ing and Waste Management** Jackson Hole, WY 9/83
- 27-29 **8th Int Colloquium on Extreme UV and X-ray Spectroscopy of Astrophysical & Laboratory Plasmas** Washington, DC 9/83
- 27-31 **Symp on Transport Processes in Membranes and Epithelia: Osmotic and Ionic Regulation** Liege, Belgium 9/83
- 27-31 **3rd Int Conf on Solid Films and Surfaces** Sydney, Australia 11/83
- 27-31 **6th Gen Conf of the Eur Phys Soc** Prague, Czech 1/84
- 27-31 **Australian Inst of Phys 6th Nat Cong** Brisbane, Queensland 1/84
- 27-31 → **Conf on Fundamentals of Cybernetics** New Hampton, NH (A. M. Cruickshank, Gordon Research Confs., Univ. of RI, Kingston, RI 02881; 401-783-4011)
- 27-6 **21st Gen Assembly of Int Union of Radio Science** Florence, Italy 1/84
- 27-8 **NATO Advanced Study Inst on Nonequilibrium Phonon Dynamics** Les Arcs, France 1/84
- 28-6 **Dynamical Systems: Renewal of Mechanism** Peyresq, France 1/84
- 28-7 **Int School of Plasma Phys—Plasma Astrophysics** Varenna, Italy 7/83

SEPTEMBER 1984

- 3-6 **10th Eur Conf of Optical Communication** Stuttgart, FRG 1/84
- 3-7 **5th Int Conf on Rapidly Quenched Metals** Wurzburg, FRG 9/83
- 3-7 → **Course on Observational and Theoretical Aspects of Relativistic Astrophysics and Cosmology** Santander, Spain (J. L. Sanz, Dpto. de Fisica Teórica, Fac. Ciencias, Av. de los Castros, s/n Santander, Spain)
- 6-7 **2nd Int Conf on Optical Fiber Sensors** Stuttgart, FRG 11/83
- 6-7 **8th Int Macromolecular Symp: Macromolecules: Interdisciplinary Developments** Interlaken, Switz. 1/84
- 6-8 → **Workshop on Personal Computer and STD Computer Interfacing for Scientific Instrument Automation** Washington, DC (L. Leffel, C.E.C., Virginia Tech, Blacksburg, VA 24061; 703-961-4848)
- 9-13 **5th ANS/ENS Int Mtg on Thermal Reactor Safety** Karlsruhe, FRG 3/84
- 9-13 **Applied Superconductivity Conf** San Diego, CA 3/84
- 9-15 → **Workshop on Electricity** Germany (C. von Rhoneck, Pedagogische Hochschule Ludwigsburg, Reauteallee 46, Postfach 220, 7140 Ludwigsburg, FRG)
- 10-12 **Int Sem on ORC-Tech: New Working Fluids for Energy Eng Alternative Heat Power Processes** Zurich, Switz. 11/83
- 10-14 **5th Int Symp on Capture Gamma-Ray Spectroscopy and Related Topics** Knoxville, TN 3/84

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- 10-21 → **NATO Advanced Study Institute in Fundamental Processes in Atomic Collision Physics** Palermo, Italy (H. Kleinpoppen, Atomic Phys. Lab., Univ. of Stirling, Stirling FK9 4LA, UK)
- 11-12 → **Conf on Reliability Aspects: From Devices to Systems** Surrey, UK (Meetings Officer, IOP, 47 Belgrave Sq., London SW1X 8QX)
- 11-14 → **8th Int Conf on Noise in Physical Systems—3rd Int Conf on 1/f Noise** Rome 3/84
- 12-19 → **6th Int Symp on High Energy Spin Phys** Marseille, France 3/84
- 13-14 → **Kinetics and Mass Transport of Silicate & Oxide Systems** London, UK 1/84
- 16-20 → **5th Top Conf on High Temperature Plasma Diagnostics** Tahoe City, CA (APS, 335 E. 45 St., New York, NY 10017)
- 17-19 → **Advances in Reactor Phys and Radiation Protection and Shielding** Chicago, IL 3/84
- 17-21 → **9th Eur Conf on Thermophysical Properties** Manchester, UK 7/83
- 17-21 → **7th Int Conf on Textures of Materials** The Netherlands 9/83
- 17-21 → **Short Course on Modern Surface Spectroscopy Techniques—AES, ESCA, SIMS, UPS Applied to Problems in Materials and Chemistry** Austin, TX 3/84
- 20-21 → **Workshop on Stopping Power for Low-Energy Ions** Linz, Austria (H. Paul, Inst. fur Experimentalphysik, Univ. of Linz, A-4040, Linz-Auhof, Austria)
- 21-24 → **Int Mtg on Photophysics and Photochemistry above 6 eV** Bombannes, France 11/83
- 23-5 → **Phys and Engineering of Medical Imaging** Maratea, Italy 3/84
- 24-28 → **11th Int Symp on Discharges and Electrical Insulation in Vacuum** Berlin, GDR 11/83
- 24-28 → **3rd Latin Am Symp on Surface Phys** San Jose, Costa Rica (A. Saenz, Escuela de Fisica, Univ. de Costa Rica, Ciudad Universitaria, Rodrigo Facio, Costa Rica)
- 25-28 → **Energy Pulse Modification of Semiconductors and Related Materials** Dresden, GDR 11/83
- 15-17 → **16th Ann Symp on Optical Materials for High Power Lasers** Boulder, CO (S. A. Rivera, Electromagnetic Technology Div., 724.02, NBS, 325 Boulder, CO 80303) [8/1/84]
- 16-18 → **Symp on Viscoelasticity and Rheology** Madison, WI (G. Moran, Math. Res. Ctr., Univ. of WI, 610 Walnut St. WARF Bldg., Madison, WI 53705)
- 18-20 → **APS Nuclear Phys Div** Nashville, TN 7/83
- 21-26 → **5th Int Mtg on Radiation Processing** San Diego, CA 9/83
- 21-27 → **Cambridge Symp on Optical and Electro-Optical Engineering** Cambridge, MA (SPIE, PO Box 10, Bellingham, WA 98227; 206-676-3290)
- 22-26 → **9th Int Conf on Infrared & Millimeter Waves** Takarazuka, Osaka, Japan 1/84
- 22-26 → **1st Int Conf Exhibition & Workshop on Text Processing Systems** Dublin, Ireland (Protext I Organizing Committee/Boole Press, PO Box 5, 51 Sandycove Rd., Dun Laoghaire Co., Dublin, Ireland) [6/1/84]
- 25-27 → **Mtg of APS Southeastern Sec** Memphis, TN (APS, 335 E. 45 St., New York, NY 10017)
- 29-2 → **APS Plasma Phys Div** Boston 7/83
- 29-31 → **1984 SERI Photovoltaic R&D 6th Ann Review** Denver, CO 1/84
- 29-2 → **OSA Ann Mtg** San Diego, CA 7/83
- 29-2 → **Mtg of APS Div of Plasma Phys** Boston, MA (APS, 335 E. 45 St., New York, NY 10017)
- 30-31 → **7th Ann Newport Conf on Fiber-optic Markets** Newport, RI 1/84
- 31-3 → **Mtg of APS Div of Particles and Fields** Santa Fe, NM (APS, 335 E. 45 St., New York, NY 10017)

NOVEMBER 1984

- 4-10 → **Intelligent Robots and Computer Vision Thermosense VII-Int Conf on Thermal Infrared Sensing for Diagnostics and Control** Cambridge, MA (SPIE, PO Box 10, Bellingham, WA 98227; 206-676-3290)
- 11-14 → **8th Conf on the Application of Accelerators in Research and Industry** Denton, TX 11/83
- 11-16 → **ANS/ENS Int Mtg** Washington, DC 3/84
- 13-15 → **Int Conf on the Applications of Lasers and Electro-Optics** Boston, MA (Laser Institute of America, 5151 Monroe St., Ste. 118W, Toledo, OH 43623) [6/10/84]
- 15-17 → **Mtg of the Texas Sec of AAPPT** Houston, TX (R. A. Bartels, Phys. Dept., Trinity Univ., San Antonio, TX 78284; 512-736-7424)
- 18-20 → **APS Fluid Dynamics Mtg** Providence, RI 9/83
- 25-30 → **Joint AAPM—Radiological Soc of N Amer Mtg** Washington, DC 9/83
- 26-30 → **Fall Mtg of the Materials Research Soc** Boston, MA (J. Balance, MRS, 9800 McKnight Rd., Suite 327, Pittsburgh, PA 15237; 412-367-3003)

OCTOBER 1984

- 1-3 → **9th Biennial Symp on Turbulence** Rolla, MO (X. B. Reed Jr, Dept. of Chem. Eng., University of Missouri-Rolla, Rolla, MO 65401) [6/1/84]
- 2-3 → **Symp on Optical Fiber Measurements** Boulder, CO 3/84
- 8-12 → **108th ASA Mtg** Minneapolis, MN 7/83
- 8-13 → **9th Int Cong on Rheology** Acapulco, Mex. 7/83
- 9-12 → **37th Gaseous Electronics Conf** Boulder, CO 7/83
- 12-13 → **Mtg of APS Ohio Sec** Cleveland, OH (APS, 335 E. 45 St., New York, NY 10017)
- 15-17 → **Workshop on Nuclear Phys with Stored Cooled Beams** Bloomington, IN 11/83

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27-30 30th Ann Conf on Magnetism and Magnetic Materials San Diego, CA 3/84

29-1 Workshop on Composite Models in Particle Phys Irvine, CA (S.P. Li, Phys. Dept., Univ. of CA, Irvine, CA 92717)

DECEMBER 1984

4-7 31st National Vacuum Symp Reno, NV 9/83

4-10 6th Int Conf on Fracture New Delhi, India 9/83

11-14 Phys Expo Paris 3/84

14-15 Symp on Dielectric Phenomena in Honor of the 70th Birthday of R. H. Cole Providence, RI 3/84

JANUARY 1985

6-11 7th Int Conf on Positron Annihilation New Delhi, India (P. C. Jain, Dept. of Phys. & Astrophys., Univ. of Delhi, Delhi, 110007, India)

13-16 165th AAS Mtg Tucson, AZ 11/83

15-18 Top Mtg on Optical Remote Sensing of the Atmosphere Lake Tahoe, NV 3/84

21-24 APS/AAPT Gen Mtg Toronto 9/83

FEBRUARY 1985

4-6 Top Mtg on the Microphys of Surfaces, Beams, and Adsorbates Santa Fe, NM 3/84

11-13 Top Mtg on Optical Fiber Communication [OSA, IEEE] San Diego, CA 11/83

24-28 56th Ann Mtg of SOR Williamsburg, VA (W. B. Russel, Dept. of Chem. Eng., Princeton Univ., Princeton, NJ 08544; 609-452-4590)

25-28 5th Top Conf on Atomic Processes in High Temperature Plasmas Pacific Grove, CA (APS, 335 E. 45 St., New York, NY 10017)

MARCH 1985

7-9 Mtg of Texas Sec of AAPT (R. A. Bartels, Phys. Dept., Trinity Univ., San Antonio, TX 78284; 512-736-7424)

18-20 Top Mtg on Optical Computing Lake Tahoe, NV 3/84

18-20 Top Mtg on Machine Vision Lake Tahoe, NV 3/84

18-25 Int Rare Earth Conf: Materials and Chem Zurich, Switz. 3/84

19-20 Top Mtg on Non-Invasive Assessment of Visual Function Lake Tahoe, NV 3/84

25-28 Symp on Semiclassical Descriptions of Atomic and Nuclear Collisions Copenhagen, Denmark (J. Bang, Niels Bohr Inst., Blegdamsvej 17, DK-2100 Copenhagen Ø, Denmark)

25-29 APS Gen Mtg Baltimore 11/83

APRIL 1985

- 8-12 **109th Ann Mtg of ASA** Austin, TX 11/83
- 22-26 **14th Int Symp on Acoustical Imaging** The Hague, The Netherlands 11/83
- 25-27 **APS Spring Mtg** Washington, DC 11/83

MAY 1985

- 13-17 **Int Conf on Nuclear Data for Basic and Applied Sci** Los Alamos, NM 1/84
- 21-24 **Conf on Lasers and Electro Optics [OSA, IEEE]** Baltimore 11/83
- 23-28 **AAAS Ann Mtg** Los Angeles 11/83
- 24-6 **Conf on Determination & Interpretation of Small Structural Differences** Erice, Italy 1/84

JUNE 1985

- 9-12 **166th Mtg of AAS** Charlottesville, VA (A. Landolt, Louisiana State Univ., Box BK, LSU Observ., Baton Rouge, LA 70803; 504-388-8276)
- 9-14 **ANS Ann Mtg** Boston, MA 3/84
- 10-14 **2nd Int Conf on Nucleus-Nucleus Collisions** Sweden (I. Otterlund, Dept. of Phys., Univ. of Lund, Solvegatan 14, S-223 62 Lund, Sweden)
- 17-21 **AAPT Mtg** Flagstaff, AZ 11/83
- 19-21 **4th Int Conf on the Numerical Analysis of Semiconductor Devices and Integrated Circuits** Dublin, Ireland (NASECODE Org. Comm., c/o Boole Press, PO Box 5, 51 Sandycove Rd., Dun Laoghaire Co., Dublin, Ireland)
- 24-29 **Int Conf on Fourier and Computerized Infrared Spectroscopy** Ottawa, Ontario (J. G. Grasselli, Standard Oil Co., 4440 Warrensville Ctr. Rd., Cleveland, OH 44128) [11/1/84]
- 24-27 **9th Symp on Thermophys Properties [NBS]** Boulder, CO (H. J. M. Hanley, NBS, 773-2, Boulder, CO 80303; 303-497-3320) [12/1/84]
- 24-6 **Summer School on Theory of Nuclear Structure and Reactions** La Rabida, Spain (Dept. Fisica Nuclear, Univ. de Sevilla, Apdo. 1065, Sevilla, Spain)

JULY 1985

- 14-19 **Conf on the Dynamics of Molecular Collisions** Snowbird, UT 1/84
- 23-25 **Physical Interactions and Energy Exchange at the Gas-Solid Interface** Hamilton, Ontario, Can. 3/84
- 24-30 **14th Int Conf on the Phys of Electronic and Atomic Collisions** Palo Alto, CA 3/84

AUGUST 1985

- 11-15 **27th Ann Mtg of AAPM** Seattle, WA 11/83

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26-30 → **Int Conf on Magnetism** San Francisco, CA (D. Suiters, ICM 85, Suite 300, 655 15 St., NW, Washington, DC 20005)

26-3 **Course and Workshop on Basic Physical Processes in Fusion Plasmas** Varenna, Italy 3/84

SEPTEMBER 1985

2-5 → **Biennial Conf of IOP Microscopy and Analysis Group** Newcastle upon Tyne, UK (Meetings Officer, IOP, 47 Belgrave Sq., London, UK SW1X 8QX)

2-6 → **11th Int Conf on Amorphous and Liquid Semiconductors** Rome, Italy (M. Capizzi, Dipart. di Fisica, Univ. di Roma, Ple. Aldo Moro 2, 00185 Rome, Italy)

5-14 **Course and Workshop on Applications of RF Waves to Tokamak Devices** Varenna, Italy 3/84

10-12 → **2nd Conf and Exhibition on Sensors and Their Applications** Southampton, UK (Meetings Officer, IOP, 47 Belgrave Sq., London SW1X 8QX)

OCTOBER 1985

13-18 → **12th Eur Conf on the Phys and Chem of Complex Nuclear Reactions** Neve Ilan, Israel (Z. Fraenkel, Nuclear Phys. Dept., Weizmann Inst., Rehovot 76100, Israel)

15-18 **OSA Ann Mtg** Washington, DC 3/84

NOVEMBER 1985

4-8 **110th Ann Mtg of ASA** Nashville, TN 11/83

7-9 → **Mtg of Texas Sec of AAPT** College Station, TX (R. A. Bartels, Phys. Dept., Trinity Univ., San Antonio, TX 78284; 512-736-7424)

18-22 **32nd Nat Vacuum Symp** Houston, TX 1/84

DECEMBER 1985

9-13 → **10th Int Conf on Infrared & Millimeter Waves** Orlando, FL (K. J. Button, MIT National Magnet Lab, Cambridge, MA 02139; 617-253-5561)

JANUARY 1986

5-8 → **167th Mtg of AAS** Houston, TX (A. Landolt, Louisiana St. Univ., Box BK, LSU Observ., Baton Rouge, LA 70803; 504-388-8276)

27-30 **APS/AAPT Mtg** Atlanta, GA 1/84

MARCH 1986

24-29 **APS Mtg** San Diego 1/84