#### CALENDAR

Information in the calendar is compiled from a file maintained in the PHYSICS TODAY editorial offices. The date at the end of each item refers to the issue of PHYSICS TODAY in which the item is first listed with more detail than appears in subsequent issues. Readers are invited to write or telephone for additional information.

new listing

· new information

#### February 1967

- 2,3 Western Spectroscopy Association (Pacific Grove, Calif.) PT Dec. 1966
- 3,4 The Surface of Mars (New York City) PT Dec. 1966
- 5-8 Society of Rheology (Santa Barbara, Calif.) PT Dec. 1966
- 6-8 Society of Rheology (Santa Barbara) PT Jan. 1967
- 14-19 Triplet State (Beirut) PT Dec. 1966
- 22,23 Neutron Scattering and Energy Band Theory for Metals and Alloys (U. of Illinois) PT Dec. 1966
- 22-24 Biophysical Society (Houston) PT Dec. 1966
- 23,24 Louisiana Society for Electron Microscopy (New Orleans) PT Dec. 1966
- 23-25 American Physical Society (Austin, Tex.) PT Dec. 1966
- 26-11 Special Problems in High Energy Physics (Schladming, Austria) PT Dec. 1966

#### March 1967

- 1-3 Accelerator Engineering and Technology (Washington, D.C.) PT Dec. 1966
- 2-4 Experimental Nuclear Magnetic Resonance (Mellon Institute, Pittsburgh) PT Jan. 1967
- 2-10 Radioactive Dating and Methods of Low-Level Counting (Vienna) PT Dec. 1966
- 6,7 Rheology of Solids (Boston) PT Dec. 1966
- 6-10 Applications of Modern Mathematics (U. of California, Los Angeles) PT Dec. 1966

- 13-17 Plutonium as a Reactor Fuel (Brussels) PT Dec. 1966
- 13-24 Multiregion Boundary Value Problems: Computer and Analytical Methods with Applications (U. of California, Los Angeles) PT Dec. 1966
- 14,15 Temperature Measurements (Los Angeles) PT Jan. 1967
- 17,18 Behavior at Surfaces (Hartford) PT Jan. 1967
- 17-21 National Science Teachers Association (Detroit) PT Dec. 1966
- 20 Field-Ion Microscopy (U. of Cambridge) PT Jan. 1967
- 20-22 Physical Processes in the Lower Atmosphere (Ann Arbor) PT Dec. 1966
- 20-22 Physical Electronics (Massachusetts Institute of Technology) PT Jan. 1967
- 21-25 Continental Drift, the Motion of the Pole, and the Rotation of the Earth (Stresa, Italy) PT Jan.
- 22-24 Modern Optics (New York City) PT Dec. 1966
- 23-25 Nucleon-Nucleon Interaction (Gainesville) PT Dec. 1966
- 27-30 American Physical Society (Chicago) PT Dec. 1966
- 27-30 APS Division of Solid-State Physics (Chicago) PT Jan. 1967
- 27-30 APS Division of High-Polymer Physics (Chicago) PT Dec. 1966
- 28-30 Engineering Aspects of Magnetohydrodynamics (Stanford U.) PT Dec. 1966
- 30-31 Transport Properties of Superconductors (University of Kent) PT Dec. 1966
- 31-11 Energetics and Mechanisms in Radiation Biology (Portmerion, Wales) PT Dec. 1966

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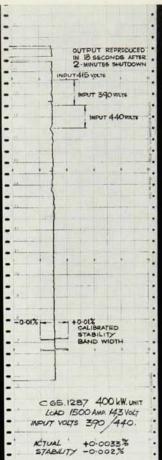
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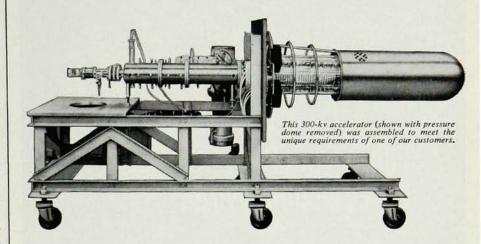
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#### April 1967

- 3-5 Thin Films (Nottingham) PT Dec. 1966
- 3-5 Solid State Chemistry (Brown U.) PT Dec. 1966
- 5-7 Spark Discharges (U. of Liverpool) PT Dec. 1966
- 5-7 Intermag (Washington, D.C.) PT Dec. 1966
- 8-13 Stereology (Chicago) PT Jan. 1967
- 12-13 Point Defects in Metals (Reading, England) PT Dec. 1966
- 12-14 Shock Tubes (Freiburg, W. Germany) PT Dec. 1966
- 12-14 The Teaching of Mathematics to Physicists (U. of Exeter) PT Jan. 1967
- 12-14 Optical Society of America (Columbus, Ohio) PT Dec. 1966
- 14,15 AAPT Central Pennsylvania Section (Huntingdon) PT Dec. 1966
- 14,15 APS Ohio Section (Columbus) PT Dec. 1966
- 17-19 Elementary Particles (London) PT Dec. 1966
- 17-19 Nondestructive Evaluation of Aerospace and Weapons Systems Components and Materials (San Antonio) PT Dec. 1966
- 17-19 Thermal Balance of Spacecraft (New Orleans) PT Dec. 1966
- 19-22 ♦ Acoustical Society of America (New York City) PT Feb. 1967
  - J. J. Zwislocki, Laboratory of Sensory Communication, Syracuse University, 821 University Ave., Syracuse, N.Y. 13210
- 19-22 Semiconductor Device Research (Bad Nauheim, West Germany) PT Dec. 1966
- 22 American Association of Physics Teachers Iowa Section (Drake U., Des Moines) PT Jan. 1967
- 24-26 Frequency Control (Atlantic City) PT Jan. 1967
- 24–26 Image Detection and Processing (Royal Radar Establishment, Great Malvern) PT Jan. 1967
- 24-27 American Physical Society (Washington, D.C.) PT Dec. 1966
- 28,29 Physics of Superconducting Devices (U. of Virginia) PT Jan. and Feb. 1967

To be held immediately after the American Physical Society meeting in Washington, the meeting will

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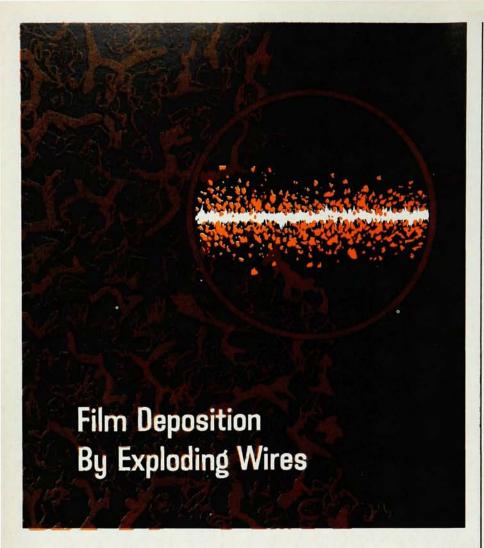
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consist of contributed and invited papers on the application of superconductivity to instrumentation. High-field magnets and superconducting computer devices are excluded. Transportation from the Sheraton-Park Hotel in Washington to Charlottesville will be provided.

Contact: D.S. Weaver Jr, University of Virginia, Physics Department, Charlottesville, Va.

May 1967

- 3-6 Rare Earths (Gatlinburg) PT Dec. 1966
- 5-6 Interaction of Light with Matter (Webster, N.Y.) PT Dec. 1966
- 8-10 Origin and Distribution of the Elements (Paris) PT Dec. 1966
- 8–10 High Temperature Chemistry (Argonne National Lab) PT Dec. 1966
- 8-10 ♦ Fluidics (Chicago) PT Feb.
- 8-10 Microwave Theory and Technique (Boston) PT Dec. 1966
- 15-18 Spectroscopy (Chicago) PT Dec. 1966
- 24-26 Canadian High-Polymer Forum (Quebec) PT Dec. 1966
- 25 Photochromism (Letchworth College of Technology, England) PT Dec. 1966
- 26, 27 Midwest Conference on Theoretical Physics (U. of Illinois) PT Dec. 1966
- 29-31 International Conference, Exhibit and World Review on Nuclear Reactors and Radioisotopes (Montreal) PT Dec. 1966

#### June 1967

4-17 • Recent Advances in Astronomy and Cosmology (U. of Nebraska) PT Feb. 1967

A review of basic astrophysics that will include energy sources of quasars, the final state of matter and cosmological implications of large red shifts. Some stipends are available for college and university teachers.

Contact: T. Morgan, Director, Behlen Laboratory of Physics, University of Nebraska, Lincoln, Neb. 68508

- 6-7 Deposition of Thin Films by Sputtering (U. of Rochester) PT Jan. 1967
- 7-9 Industrial Physics—the Contribution of Government-Sponsored

- Laboratories (Harrogate) PT Jan. 1967
- 8-17 Solid Mechanics (Brown U.) PT Jan. 1967
- 11-15 Society for Industrial and Applied Mathematics (Washington, D.C.) PT Feb. 1967 Contact: 1967 National Meeting, SIAM, 33 South 17th Street, Philadelphia, Pa.
- 12–13 Inter-Society Color Council (New York City) PT Dec. 1966
- 13-15 Vacuum Metallurgy (New York City) PT Dec. 1966
- 13-15 American Astronomical Society (Yerkes Observatory) PT Dec. 1966
- 13-16 Conjugate-Point Phenomena (Boulder) PT Dec. 1966
- 15–17 ♦ American Association of Physics
  Teachers (St. Lawrence U., Canton, N.Y.) PT Feb. 1967
  Contact: S.S. Ballard, Physics
  Department, U. of Florida, Gainesville, Fla. 32603
- 18-22 Health Physics Society (Washington, D.C.) PT Jan. 1967
- 18–23 Kinetics of Reactions in Ionic Systems (Alfred, N.Y.) PT Dec. 1966
- 19 (through 25 Aug.) Theoretical Physics (U. of Colorado) PT Dec. 1966
- 19-23 Colloquium Spectroscopicum Internationale (Carleton U., Ottawa) PT Dec. 1966
- 19-23 Phase Transitions of the Second Kind (Cleveland) PT Jan. 1967

Contact: J. G. Adler, Physics De partment, Western Reserve University, Cleveland, Ohio 44106

- 19-23 Carbon (Buffalo) PT Jan. 1967
- 19-28 Physics of the Magnetosphere (Boston College, Massachusetts) PT Dec. 1966
- 21-23 American Physical Society (Toronto) PT Dec. 1966
- 27-2 Thin Films (Budapest) PT Dec. 1966

#### July 1967

- 3-5 Electron Diffraction (London) PT Jan. 1967
- 4 (through 25 Aug.) Many-Body Physics (Les Houches, France) PT Dec. 1966
- 4-7 High-Energy Molecular Beams (Cannes) PT Jan. 1967

Abstracts deadline: 1 April. Contact: F. M. Devienne, Directeur, Laboratoire Méditérranéen de Recherches Thermodynamiques, 2, Avenue Villebois-Mareuil, Nice, France

16 ♦ (through 31 Aug.) Battelle Seattle Rencontres in Mathematics and Physics (Seattle) PT Feb. 1967

Individual contacts and unscheduled discussions will play a major role in this exchange between physicists and mathematicians, but some courses will be given. Centers of interest are differential geometry, topology, relativity and Feynman graphs.

Contact: C. M. DeWitt, Physics Department, U. of North Carolina. Chapel Hill, N.C. 27514 and J. A. Wheeler, Palmer Physical Lab, Princeton U., Princeton, N.J. 08540

- 17-21 Neutron Thermalization and Reactor Spectra (U. of Michigan) PT Dec. 1966
- 17-23 Physics of Electronic and Atomic Collisions (Leningrad) PT Dec. 1966

#### August 1967

- 27–2 Phenomena in Ionized Gases (Vienna) PT Dec. 1966
- 27-3 International Union of Pure and Applied Chemistry (Prague) PT Dec. 1966
- 28-1 Atomic Masses (U. of Manitoba) PT Jan. 1967

Sponsor: International Union of Pure and Applied Physics, National Research Council of Canada. Contact: H. E. Duckworth, U. of Manitoba, Winnipeg, Canada

31-2 American Physical Society (Seattle) PT Dec. 1966

#### September 1967

- 4-8 Solid-State Devices (U. of Manchester) PT Dec. 1966
- 4-10 International Congress of Pure and Applied Chemistry (Prague) PT Dec. 1966
- 5-9 Molecular Structure and Spectroscopy (Ohio State U.) PT Jan. 1967

The 22nd annual symposium will be held at Ohio State's physics department. Invited sessions scheduled so far will cover high-resolution infrared spectra of planets, P. and J. Connes, L. Kaplan; recent laser experiments, A. Schawlow, G. Amat; spectroscopy and kinetics, H. Wolfhard; theory of molecular luminescence, M. Kasha. An instrument

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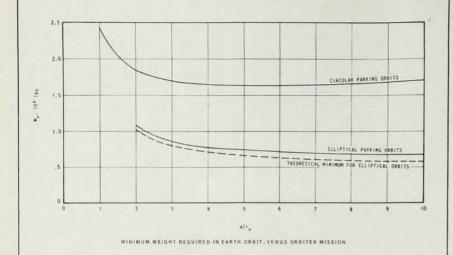


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exhibit is planned. Dormitory accommodations will be available for both single and married participants.

Contact: K. Naharari Rao, Physics Department, Ohio State University, 174 West 18th Avenue, Columbus, Ohio 43210.

6-8 • II-IV Semiconducting Compounds (Providence, R.I.) PT

Jan. 1967

The meeting, organized by a committee representing both academic and industrial research, in conjunction with an international advisory group, is an American Physical Society Topical Conference. Abstracts, due 15 May, are sought on experimental determination of band-structure parameters, band-structure calculations, lattice vibrations, Raman and nonlinear optical effects, transport properties, electron-phonon interactions, magnetic properties, electrical and thermal conductivity, thermodynamic properties, crystal growth, solubility and diffusion of defects, preparation and properties of p-n junctions, surface effects, luminescence, photoconductivity, radiation damage and electron paramagnetic resonance.

Contact: D. W. Langer, Conference Secretary, Aerospace Research Laboratories, Wright-Patterson Air Force Base, Ohio 45433.

- 7-13 Nuclear Structure (Tokyo) PT Dec. 1966
- 10-16 International Conference on Magnetism (Boston) PT Dec. 1966
- 11-15 High-Energy Accelerators (Cambridge) PT Dec. 1966
- 11-16 International Congress on Magnetism (Boston) PT Dec. 1966
- 13,14 High-Voltage Insulation in Vacuum (London) PT Jan. 1967

Sponsor: The Institute of Physics and the Physical Society. Abstracts deadline: 14 July. Contact: Meetings Officer, The Institute of Physics and The Physical Society, 47 Belgrave Square, London, SW 1, England

18-22 • Localized Excitations in Solids (Los Angeles) PT Jan. 1967

Sponsor: International Union of Pure and Applied Physics. Contact: A. A. Maradudin, Physics Department, U. of California, Irvine, Calif. 92664

25-29 • Mass Spectrometry (Berlin) PT Jan. 1967

Contact: Geschaftsstelle der Gesellschaft Deutscher Chemiker, z. Hd. von Herrn W. Fritsche, 6 Frankfurt/Main, Postfach 9075, Germany

26-28 Magnetic Materials and Their Applications (London) PT Dec. 1966

#### October 1967

11-13 Optical Society of America (Detroit) PT Dec. 1966

18-20 • Gaseous Electronics (San Francisco) PT Jan. 1967

As usual papers on engineering applications or specific devices are excluded from this American Physical Society Topical Conference. Abstracts on basic processes and phenomena in ionized gases must present results already accomplished and are due by 1 Sept.

Contact: R. N. Varney, Orgn. 52–40, Building 201, Lockheed Missiles & Space Company, 3251 Hanover Street, Palo Alto, Calif. 94304.

#### November 1967

8-11 Acoustical Society of America (Miami) PT Dec. 1966

16-18 American Physical Society (New York City) PT Dec. 1966

#### December 1967

5-7 • American Astronomical Society (Philadelphia) PT Jan. 1967 Contact: G. C. McVittie, U. of Illinois Observatory, Urbana, Ill.

18-20 American Physical Society (Pasadena) PT Dec. 1966

#### January 1968

29-1 American Physical Society (Chicago) PT Dec. 1966

29-1 ◆American Association of Physics Teachers (Chicago) PT Feb. 1967

Contact: S.S. Ballard, Physics Department, U. of Florida, Gainesville, Fla. 32603

#### February 1968

26-28 American Physical Society (Boston) PT Dec. 1966

#### March 1968

18-21 American Physical Society (Berkeley) PT Dec. 1966

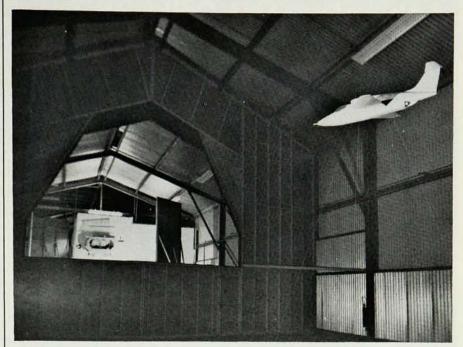
#### April 1968

17-19 Fourth International Vacuum Congress (Manchester) PT Dec. 1966

#### July 1968

1 (through 24 Aug.) Nuclear Physics (Les Houches, France) PT
Dec. 1966

# High Resolution Technique Advances Radar Cross-Section Research



As part of Cornell Aeronautical Laboratory's experimental research on radar cross sections of aircraft, missiles and reentry bodies, an exceptionally high resolution radar has been developed which can resolve scattering points on target bodies as close as 3 inches.

An X-band FM/CW system employing 35 percent bandwidth, the experimental system complements other experimental techniques at CAL for measuring extremely small cross sections. Depicted above, it is one of four radar systems and cross-section ranges operated at CAL.

Techniques of this type are part of a broad analytical and experimental program in radar cross-section technology, begun back in the mid-1950's, that has produced excellent correlation between theory and measurement.

CAL's research in electromagnetic scattering is but one example of a widely varied program in aeronautics and electronics. Other areas include avionics, computer sciences, hypersonic aerodynamics, applied physics, operations and systems research, applied mechanics, flight research and aerospace vehicle concepts. Qualified scientists and engineers are needed to bulwark this growing program. Use the coupon for additional information.



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