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Theory

The University of Colorado has been awarded a National Science Foundation grant to help support its annual Institute for Theoretical Physics. Under the direction of Wesley E. Brittin, Department of Physics and Astrophysics, the Institute has grown in attendance from approximately twenty-five visiting physicists representing four countries, to over two hundred participants representing fifteen countries in less than a decade.

The first four weeks of this summer institute, 19 June to 14 July, will be devoted to mathematical methods of theoretical physics. From 17 July to 4 Aug. there will be three weeks of lectures and discussions on particle physics. The final three weeks, 7 Aug. to 25 Aug. will be devoted to selected topics in theoretical physics.

A limited number of predoctoral and postdoctoral stipends will be awarded to qualified candidates, and interested persons should complete their applications for stipends prior to 1 Feb. There are no formal application forms. Each applicant should send curriculum vitae and have two letters of recommendation sent to Wesley E. Brittin, Chairman, Department of Physics and Astrophysics, University of Colorado, Boulder, Colo. Stipend recipients will be notified before 15 March.

Astrophysics

The 1967 Texas symposium on relativistic astrophysics will be held in New York City from 23 to 27 Jan. A topical conference of the American Physical Society, the meeting will also be sponsored by the American Astronomical Society, the Belfer Graduate School of Science of Yeshiva University, the Goddard Institute for Space Studies, The Southwest Center for Advanced Studies and the University of Texas. Symposium headquar-

ters will be in the Hotel New Yorker.

This year's topics will include observations of quasistellar sources, observations and implications of the isotropic background radiation, x-ray and gamma-ray astronomy, cosmic-ray and neutrino physics, stellar-collision theories of quasistellar sources, and the status of observational cosmology. There will be no contributed papers.

Attendance is open to all members of The American Physical Society. Further information can be obtained from Mrs Enid Silva, Belfer Graduate School of Science, Yeshiva University, Amsterdam Avenue and 186th Street, New York, N.Y. 10033.

Shock tubes

A three-day conference on shock tubes, shock waves and their application will be held 12 to 14 April in Freiburg, West Germany, under the auspices of the Ernst Mach Institut. H. Reichenbach will be the general chairman. The American Physical Society's Division of Fluid Dynamics will be the channel for American participation and abstracts should be sent to R. J. Emrich, Department of Physics, Lehigh University, Bethlehem, Pa., by 1 Jan.

Elementary particles and metals

Britain's Institute of Physics and The Physical Society has scheduled two meetings for the middle of next April.

From 17 to 19 April, the Institute and Society's nuclear-physics subcommittee will hold a conference on elementary particles at University College, London. The provisional program includes meson and baryon resonances, tests of violations of invariance, very high energies, quark theory and experiments, current algebras, pion-nucleon interaction and hypernuclei. Three-hundred-word abstracts, in triplicate, should be sent by 20 Jan. to B. G. Duff, Department of

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Universities, institutions, government laboratories, and companies wishing to post notices of positions may send descriptions of the openings on $8\frac{1}{2}$ x 11 paper in multiple copies (25 required) to the Institute office by January 16, 1967, or post them on arrival at the meeting. If you plan to have a representative present, to interview applicants, please indicate his name at the bottom of the job description sheets.

SEEKING A NEW POSITION?

Applicants may obtain registration forms and further information from the Institute office. *Preregistration is important*. Complete registration forms must be received at the Institute by January 16, 1967 to insure their inclusion at this register.

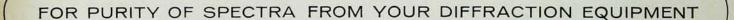
INTERVIEWS.

It is to the advantage of the registrants to be present. Interviews will be arranged between employers' representatives and applicants attending the meeting.

COMPLETE REGISTER of applicants will be available upon request at the meeting and after the meeting at a nominal service charge.

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Physics, University College, London, Gower Street, London, WC 1.

A conference on point defects in metals will meet 12 and 13 April at the J. J. Thomson Physical Laboratory at the University of Reading. The meeting will emphasize the structure, formation and migration of point defects: their mutual interaction and their interaction with other defects. Other parts of the program will discuss quenching, radiation damage, annealing and diffusion where point defects are involved. Abstracts (300 words) must be sent by 15 Feb. to J. N. Lomer, J. J. Thomson Physical Laboratory, Whiteknights Park, Reading, Berkshire.

For application forms and additional information write to the Meetings Officer at The Institute of Physics and The Physical Society, 47 Belgrave Square, London SW 1, England.

Current Listings

- · new announcement
- change from previous listing

December 1966

- 1-3 American Physical Society (Nashville): R. G. Sachs, PO Box 344, Argonne, Ill.
- 5 (through 21 Jan.) Quantum Chemistry, Solid-State Physics and Quantum Biology (U. of Florida) spons'd by U. of Florida, Swedish U. of Uppsala: P.-O. Löwdin, Quantum Theory Project, Nuclear Sciences Bldg., U. of Florida, Gainesville, Fla. (See July PT, p. 139)
- 5-8 Polarized Targets and Ion Sources (Saclay), by invitation: A. Abragam, Direction de la Physique, Centre d'Etudes Nucléaires de Saclay, PB 2, Gif-sur-Yvette (Essone), France (See July PT, p. 141)
- 7-9 URSI-IEEE Fall Meeting (Palo Alto) spons'd by Internat'l Scientific Radio Union, Institute of Electrical and Electronics Engineers: J. Hannaum, Nat'l Academy of Sciences, 2101 Constitution Ave., Washington, D.C.
- 8, 9 Thermonuclear Research (U. of Texas) spons'd by Texas Atomic Energy Research Foundation, U. of Texas: A. A. Dougal, Attn: II Symposium, Engineering Science Bldg. 112, U. of Texas, Austin, Tex. (See Oct. PT, 123)
- 14-16 Gas-Surface Interactions (San Diego) spons'd by Air Force Office of Scientific Research, General Atom-

- ic: H. Saltsburg, General Dynamics/General Atomic, PO Box 608, San Diego, Calif. (See Mar. PT, p. 116)
- 26-31 American Association for the Advancement of Science (Washington, D.C.): R. L. Taylor, AAAS, 1515
 Massachusetts Ave., NW, Washington, D.C.
- 28-30 American Physical Society (Stanford): W. Whaling, California Inst. of Technology, 1201 E. California St., Pasadena, Calif.
- 28-30 American Astronomical Society (U. of Calif., Los Angeles): G. C. Mc-Vittie, U. of Illinois Observatory, Urbana, Ill.

January 1967

- 4-7 Solid-State Physics (U. of Manchester) spons'd by Inst. of Physics and Physical Soc.: Meetings Officer, IPPS, 47 Belgrave Sq., London SW 1, England (See Sept. PT, p. 127)
- 9-18 Spectroscopy (Bombay) spons'd by Indian Dept. of Atomic Energy, Internat'l Astronomical Union, Internat'l Union of Pure and Applied Physics, Internat'l Union of Pure and Applied Chemistry: Secretary, Internat'l Conference on Spectroscopy, Atomic Energy Establishment Trombay, 414A Cadell Rd., Bombay, India (See July PT, p. 139)
- 23-27 Relativistic Astrophysics (New York City) APS Topical Conf. spons'd by American Astronomical Society, Yeshiva U., Goddard Inst. for Space Studies, Southwest Center for Advanced Studies, U. of Texas:

 A. G. W. Cameron, Belfer Graduate School of Science, Yeshiva U., Amsterdam Ave. & 186th St., New York, N.Y.
- 25-27 American Crystallographic Association (Atlanta); send abstracts by 5 Dec. to R. A. Young, Physics Dept., Georgia Inst. of Technology, Atlanta; H. G. Smith, Solid State Div., Oak Ridge Nat'l Lab, Oak Ridge, Tenn.
- 30-2 American Physical Society (New York City): K. K. Darrow, The American Physical Soc., 538 W. 120th St., New York 27, N.Y.
- 30-2 American Association of Physics Teachers (New York City): A. B. Arons, Physics Dept., Amherst College, Amherst, Mass.

February 1967

- 5-8 Society of Rheology (Santa Barbara, Calif.): J. L. White, Research Lab, US Rubber Co., Wayne, N.J.
- 14-19 Triplet State (Beirut) spons'd by the American University of Beirut; abstracts deadline 15 Nov.: A. B. Zahlan, Physics Dept., American University, Beirut, Lebanon (See Aug. PT, p. 99)
- 15, 16 Electron Probe Microanalysis (London) spons'd by Inst. of Physics and Physical Soc.: J. A. Belk, Metallurgy Dept., U. of Aston, Birmingham, England
- 15-17 Solid-State Circuits (Philadelphia) spons'd by Inst. of Electrical and Electronics Engineers, U. of Pennsylvania: W. T. Higgins, Sanders Associates, Microwave Division, Ledge St., Nashua, N.H.

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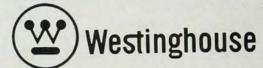
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- American Physical Society (Austin, Tex.): W. Whaling, California Inst. of Technology, 1201 E. California St., Pasadena, Calif. 23-25
- 26-11 Special Problems in High-Energy Physics (Schladming, Styria, Austria), U. of Graz winter school: R. Baier, Institut für Theoretische Physik, Universitätsplatz 5, A-8010 Graz. Austria
- High-Energy Physics and Nuclear Structure (Weizmann Inst.), by invitation, spons'd by CERN, Weizmann Inst.: G. Alexander, Weizmann Inst., PO Box 26, Rehovoth,

March 1967

- Accelerator Engineering and Technology (Washington, D.C.); send abstracts by 15 Nov. to J. Martin, Oak Ridge Nat'l Lab, PO Box X, Oak Ridge, Tenn.: E. H. Eisenhower, Nat'l Bureau of Standards, Washington, D.C. (See Aug. PT, p. 99) 1-3
- 2-10 Radioactive Dating and Methods of Low-Level Counting (Vienna) spons'd by Internat'l Atomic Energy Agency, Joint Commission on Applied Radioactivity: J. H. Kane, Chief, Confs. Branch, Div. of Tech-nical Information, Atomic Energy Commission, Washington, D.C.
- Rheology of Solids (Boston): R. H. Supnik, Plas-Tech Equipment Corp., 4 Mercer Rd., Natick, Mass.
- Plutonium as a Reactor Fuel (Brussels) spons'd by Internat'l Atomic Energy Agency: J. H. Kane, Chief, Conferences Branch, Div. of Tech-nical Information, Atomic Energy Commission, Washington, D.C.
- 17-21 National Science Teachers Association (Detroit): Executive Secre-tary, NSTA, 1201 Sixteenth St., NW, Washington, D.C. (See Sept. PT, p. 127)
- Physical Processes in the Lower Atmosphere (Ann Arbor) spons'd by U. of Michigan, American Meteorological Soc.: A. C. Wiin-Nielsen, Meteorology and Oceanography Dept. U. of Michigan, 2038 East Engineering Bldg., Ann Arbor, Mich 20-22 Mich.
- Nucleon-Nucleon Interaction (Gainesville), APS Topical Conf.; abstracts deadline 20 Jan.: A. E. S. Green, Physics Dept., U. of Florida, 23-25 Gainesville, Fla.
- American Physical Society (Chicago): R. G. Sachs, PO Box 344, Argonne, Ill.
- APS Division of High-Polymer Physics (Chicago): P. H. Linden-meyer, Chemstrand Research Center, PO Box 731, Durham, N.C.
- Modern Optics (New York City); J. Fox, Polytechnic Inst. of Brook-lyn, 333 Jay St., Brooklyn, N.Y.
- 28-30 Engineering Aspects of Magnetohydrodynamics (Stanford U.); abstracts deadlines 28 Nov., 16 Dec.: R. H. Eustis, Mechanical Engineering Dept., Stanford U., Stanford,
- 30-31 Transport Properties of Superconductors (University of Kent) spons'd by Inst. of Physics and Physical Soc.; send abstracts by 17 Feb. to G. Rickayzen, University Physics Labs, Canterbury, Kent:

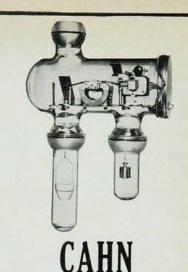
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- Spark Discharges (U. of Liverpool) spons'd by Inst. of Physics and Physical Soc.: Meetings Officer, IPPS, 47 Belgrave Sq. London SW I, England
- 5-7 Intermag (Washington, D.C.) spons'd by Inst. of Electrical and Electronics Engineers magnetics group; abstracts deadline 7 Dec.: R. F. Elfant, IBM Watson Research Center, PO Box 218, Yorktown Hts., N.Y.
- Point Defects in Metals (Reading) spons'd by Inst. of Physics and Physical Soc., Inst. of Metals; send abstracts by 15 Feb. to J. N. Lomer, J. J. Thomson Physical Lab, White-knights Park, Reading, Berks.: Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1, England 12-13
- 12-14 Shock Tubes (Freiburg, W. Germany) spons'd by Ernst Mach Inst.; abstracts deadline 1 Jan.; R. J. Emrich, Secretary, APS Div. of Fluid Dynamics, Lehigh U., Bethleben, B.
- Elementary Particles (London) spons'd by Inst. of Physics and Physical Soc.; send abstracts by 20 Jan. to B. G. Duff, Physics Dept., University College London, Gower St., London, WC 1: Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1, England 17-19
- Nondestructive Evaluation of Aerospace and Weapons Systems Components and Materials (San Antonio) spons'd by Soc. for Nondestructive Testing; abstracts deadline 15 March: W. A. Hewgley, Southwest Research Inst., P. O. Box 2296, San Antonio, Tex. 17-19
- 17-19 Thermal Balance of Spacecraft (New Orleans) spons'd by American Inst. of Aeronautics and Astronautics, Nat'l Bureau of Standards, Air Force: Y. S. Touloukian, Thermo-physical Properties Research Center, Purdue U., 2595 Yeager Rd., Lafayette, Ind. Balance of Thermal Spacecraft
- Acoustical Society of America (New York City): J. Zwilocki, Spe-cial Education Bldg., Syracuse U., 805 S. Crouse Ave., Syracuse 10,
- 19-22 Semiconductor Device Research (Bad Nauheim, West Germany) spons'd by Inst. of Electrical and Electronics Engineers, German Phy-Sical Soc., German Communications Science Soc.; send abstracts by 15 Dec. to W. J. Kleen, Balanstr. 73, 8 Munich 8.: K.-H. Riewe, German Physical Soc., Heraeusstr. 12-14, 645 Hanau, West Germany
- American Physical Society (Washington, D.C.): K. K. Darrow, The American Physical Society, 538 W. 120th St., New York 27, N.Y.

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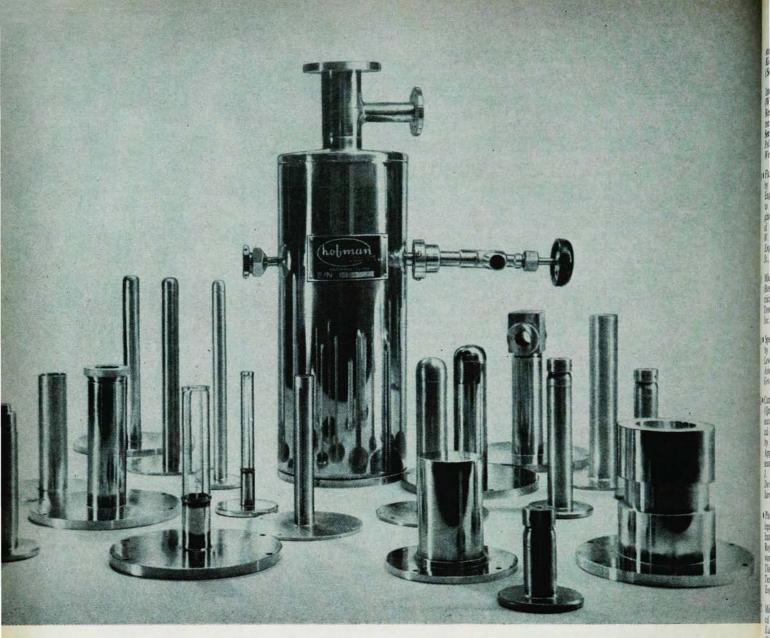
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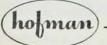
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- stracts deadline 1 Dec.: W. C. Koehler, ORNL, Oak Ridge, Tenn. (See Sept. PT, p. 127)
- 5-6 Interaction of Light with Matter (Webster, N.Y.) spons'd by Xerox Research and Advanced Development Center: APS New York State Section Spring Meeting: E. M. Pell, Xerox Corp., 800 Phillips Rd., Webster, N.Y.
- 8-10 Fluidics (Washington, D.C.) spons'd by American Soc. of Mechanical Engineers; send abstracts by 3 Oct. to F. T. Brown, Mechanical Engineering Dept., Massachusetts Inst. of Technology, Cambridge, Mass.: W. H. Larkin, ASME Hq., United Engineering Center, 345 E. 47th St., New York, N.Y.
- 8-10 Microwave Theory and Technique (Boston) spons'd by Inst. of Electrical and Electronics Engineers: R. Tenenholtz, Microwave Associates, Inc. Burlington, Mass.
- 15-18 Spectroscopy (Chicago) spons'd by Soc. for Applied Spectroscopy:

 Lew Malter, Lew Malter & Assoc., PO Box 252, Morton Grove, Ill.
- 24-26 Canadian High-Polymer Forum (Quebec) spons'd by Nat'l Research Council of Canada, Chemical Inst. of Canada; send abstracts by 15 Feb. to D. M. Wiles, Div. of Applied Chemistry, National Research Council, Ottawa, Ontario:

 J. F. Henderson, Research and Development Div., Polymer Corp., Sarnia, Ontario, Canada.
- Photochromism (Letchworth College of Technology) spons'd by Inst. of Physics and Physical Soc., Royal Inst. of Chemistry, Letchworth College of Technology: The Principal (KJD), College of Technology, Letchworth, Herts., England
- 26,27 Midwest Conference on Theoretical Physics (U. of Illinois): L. P. Kadanoff, Physics Dept., U. of Illinois, Urbana, Ill.

June 1967

- 12-13 Inter-Society Color Council (New York City): R. M. Evans, Eastman Kodak Co., Rochester, N. Y.
- 13-15 Vacuum Metallurgy (New York City) spons'd by American Vacuum Soc., American Inst. of Mechanical Engineers: E. L. Foster, Jr., Materials Engineering Dept., Battelle Memorial Inst., 505 King Ave., Columbus, Ohio.
- 13-15 American Astronomical Society (Yerkes Observatory): G. C. McVittie, U. of Illinois Observatory, Urbana, Ill.
- 13-16 Conjugate-Point Phenomena (Boulder) spons'd by Nat'l Center for Atmospheric Research, Environmental Science Services Administration: Aeronomy Laboratory, (540.03) ESSA-ITSA, Boulder, Colo. (See Mar. PT, p. 113)
- 18-23 Kinetics of Reactions in Ionic Systems (Alfred, N.Y.); abstracts deadline 30 Nov.: T. J. Gray. State U. of New York College of Ceramics, Alfred U., Alfred, N.Y.
- (through 25 Aug.) Theoretical Physics (U. of Colorado): W. E.

- Brittin, Dept. of Physics and Astrophysics, U. of Colorado, Boulder, Colo.
- 19-23 Colloquium Spectroscopicum Internationale (Carleton U., Ottawa) spons'd by Canadian Assoc. for Applied Spectroscopy: Secretary, XIII Colloquium Spectroscopicum Internationale, Nat'l Research Council, Ottawa 7, Canada
- 19-28 Physics of the Magnetosphere (Massachusetts) spons'd by Air Force Research Labs, Boston College: R. L. Carovillano, Physics Dept., Boston College, Chestnut Hill, Mass.
- 21-23 American Physical Society (Toronto): K. K. Darrow, The American Physical Society, 538 W. 120th St., New York 27, N.Y.
- Thin Films (Budapest) spons'd by Internat'l Commission for Optics, Hungarian National Commission for Optics, Hungarian Society for Optics, Acoustics and Cinematography: Secretariat, Hungarian Society for Optics, Acoustics and Cinematography, Budapest V, Szabadságtér 17, Hungary

July 1967

- 4 (through 25 Aug.) Many-Body Physics (Les Houches, France): C. DeWitt, Physics Dept., U. of North Carolina, Chapel Hill, N.C.
- 17-23 Physics of Electronic and Atomic Collisions (Leningrad) spons'd by USSR Academy of Sciences; abstracts deadline 1 Feb.: Fifth Internat'l Conf. on the Physics of Electronic and Atomic Collisions, A. F. Ioffe Physico-Technical Institute, Leningrad K-21, USSR (See Aug. PT, p. 99)

August 1967

- 27-2 Phenomena in Ionized Gases (Vienna) spons'd by Internat'l Union of Pure and Applied Physics, Austrian scientific societies; abstracts deadline 15 Apr.: VIII Internationale Ionisationskonferenz, Postfach 888, A-1082, Vienna, Austria.
- 27-3 International Union of Pure and Applied Chemistry (Prague): R. Morf, Secretary General, IUPAC, c/o F. Hoffman-La Roche & Co., 4002 Basle, Switzerland
- 31–2 American Physical Society (Seattle): W. Whaling, California Inst. of Technology, 1201 E. California St., Pasadena, Calif.

September 1967

- 4-8 Solid-State Devices (U. of Manchester) spons'd by Inst. of Physics and Physical Soc.: Meetings Officer, IPPS, 47 Belgrave Sq., London, SW 1, England
- 4-10 International Congress of Pure and Applied Chemistry (Prague) spons'd by Czech Academy of Sciences, Czech Chemical Soc.: Chairman, Organizing Committee, XXI Internat'l Congress of Pure and Applied Chemistry, PO Box 139, Praha 6-Dejvice, Czechoslovakia
- 7-13 Nuclear Structure (Tokyo) spons'd by Internat'l Union of Pure and

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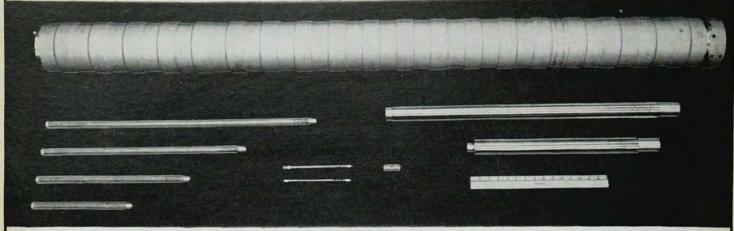
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Applied Physics: 1. Nonaka, Inst. for Nuclear Study, U. of Tokyo, Kitatama - Gun, Tanashi - Machi, Tokyo, Japan

- 11-15 High-Energy Accelerators (Cambridge), by invitation, spons'd by Cambridge Electron Accelerator: W. A. Shurcliff, CEA, Harvard U., 42 Oxford St., Cambridge 38, Mass.
- 11-16 International Congress on Magnetism (Boston) spons'd by Internat'l Union of Pure and Applied Physics, American Inst. of Physics; send abstracts by 1 Apr. to J. S. Smart, IBM Research Center, Yorktown Heights, N.Y.: A. J. Freeman, Nat'l Magnet Lab, Mass. Inst. of Technology, Cambridge, Mass.

October 1967

11-13 Optical Society of America (Detroit): Mary E. Warga, 1155 16th St., NW, Washington 6, D.C.

November 1967

- 8-11 Acoustical Society of America (Miami): J. C. Steinberg, Marine Lab, I Rickenbacker Causeway, Virginia Key, Miami 49, Fla.
- 16-18 American Physical Society (New York City): K. K. Darrow, The American Physical Society, 538 W. 120th St., New York 27, N.Y.

December 1967

18-20 American Physical Society (Pasadena): W. Whaling, California Inst. of Technology, 1201 E. California St., Pasadena, Calif.

January 1968

29-1 • American Physical Society (Chicago): R. G. Sachs, PO Box 344, Argonne, Ill.

February 1968

26-28 • American Physical Society (Boston): K. K. Darrow, The American Physical Soc., Columbia U., New York, N.Y.

March 1968

18-21 • American Physical Society (Berkeley): W. Whaling, California Inst. of Technology, 1201 East California St., Pasadena, Calif.

April 1968

17-19 • Fourth International Vacuum Congress (Manchester) spons'd by Internat'l Union for Vacuum Science and Technology and their Applications: Secretary, Joint British Committee for Vacuum Science and Technology, 47 Belgrave Sq., London SW 1 England

July 1968

1 • (through 24 Aug.) Nuclear Physics (Les Houches, France); applications deadline 1 Mar., 1968: C. DeWitt, Physics Dept., U. of North Carolina, Chapel Hill, N.C.

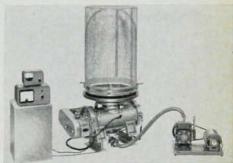


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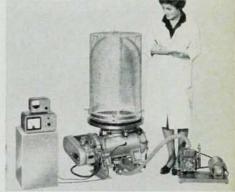
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