

CALENDAR

This is a complete calendar. It lists all physics-related meetings known to us. For the next two months we will publish only new information (partial calendar); in the third month (October) we will again publish a complete calendar as far into the future as we have information. During months with a partial calendar, readers can add new entries to their last complete calendar.

Information in the calendar is compiled from a file maintained in the PHYSICS TODAY office. Readers are invited to write or telephone for general calendar information beyond what we print. For complete information concerning an entry, readers are advised to consult the contact and the original PHYSICS TODAY reference.

Abbreviations:

AAPT—American Association of Physics Teachers

AAS—American Astronomical Society

ACA—American Crystallographic Assoc.

APS—American Physical Society

ASA—Acoustical Society of America

OSA—Optical Society of America

S OF R—Society of Rheology

AEC—US Atomic Energy Commission

AFCLR—Air Force Cambridge Research Laboratories

ANS—American Nuclear Society

AVS—American Vacuum Society

IAEA—International Atomic Energy Agency

IEEE—Institute of Electrical and Electronics Engineers

IPPS—The Institute of Physics and The Physical Society

IUPAP—International Union of Pure and Applied Physics

NBS—National Bureau of Standards

ORNL—Oak Ridge National Laboratory

Coding:

date subject ☐ HOST ☐ Location (Contact) [submission deadline] *Physics Today* ref.
• new listing ♦ new information

JULY 1970

2 Electrical Measurement of the Chemical Properties of Sea Water ☐ Wash., D.C. 2/70

5, 6 ☐ ISRAEL PHYS. SOC. ☐ Tel Aviv, Israel 5/70

6-8 Exoelectrons ☐ Braunschweig, Germany 6/70

6-10 Microwave Spectroscopy ☐ IPPS ☐ Bangor, Wales 2/70

6-10 Progress in Safeguards Techniques ☐ IAEA, AEC ☐ Karlsruhe, Germany 1/70

6-11 Applications of Holography ☐ FRENCH OPTICS COMMITTEE. IUPAP ☐ Besancon, France 11/69

6-12 ☐ SOCIETY OF NUCLEAR MEDICINE ☐ Washington, D. C. 7/69

7-9 Microscopy ☐ IPPS ☐ Newcastle upon Tyne, UK 4/70

7-10 International Conference on the Chemistry and Physics of Organic Scintillators and Liquid Scintillation Counting ☐ UNIVERSITY OF CALIF. MEDICAL CENTER,

ARGONNE NATIONAL LABORATORY
☐ San Francisco 11/69

13-15 ☐ AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE ☐ Washington, D. C. 7/69

13-17 International Seminar on the History of Physics in Physics Education ☐ IUPAP ☐ MIT, Cambridge, Mass. 11/69

19-24 Cosmic Rays ☐ BOLIVIAN GOVERNMENT, BOLIVIAN ACADEMY OF SCIENCES, UNIVERSIDAD MAYOR DE SAN ANDRES ☐ La Paz, Bolivia 4/70

20-24 Dielectric Materials, Measurements and Applications ☐ IEEE, INSTITUTE OF ELECTRICAL ENGINEERS (UK) ☐ Univ. of Lancaster, UK 12/69

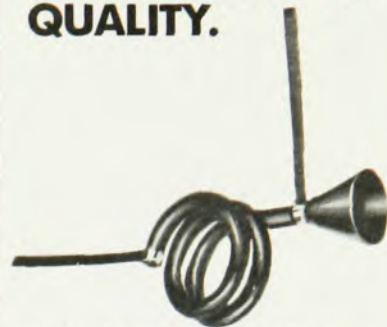
21-24 Nuclear and Space Radiation Effects ☐ IEEE ☐ San Diego, Calif. 12/69

21-24 Atomic Physics ☐ IUPAP ☐ Oxford, UK 10/69

22-24 Electron Probe Analysis ☐ ELECTRON PROBE SOCIETY ☐ New York, N.Y. 4/70

27-31 Instrumentation Science ☐ INSTRUMENT SOC. OF AMERICA ☐

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H. Haken Laser Theory

By Dr. rer. nat. H. Haken, o. Professor für
Theoretische Physik, Institut für
Theoretische Physik der Universität
Stuttgart

With 72 figures. XIX, 320 pages. 1970
Cloth US \$33.00

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and the rate equations. It also pro-
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optical resonators and the quantum
theory of coherence.

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newly developed. They comprise the
quantum mechanical Langevin equa-
tions, the density-matrix equation
and the generalized Fokker-Planck
equation. A systematic specialization
yields the semiclassical equations and
the rate equations, whose additional
heuristic derivation allows each chap-
ter to be understood without knowl-
edge of the preceding, mathe-
matically more sophisticated ones.
Among the subjects treated are in-
tensities and frequency shifts in single
and multi-mode action in gas and
solid-state lasers, stability, coexis-
tence of modes, different kinds of
mode locking, ultrashort pulses,
behaviour in an external magnetic
field, relaxation oscillations, spiking,
superradiance, photo echo, giant
pulses, laser cascades and quantum
fluctuations, e. g. phase and amplitude
noise and photon statistics.

■ Leaflet on request

JULY 1970

Geneva, N. Y. 5/70

29-31 **Acoustical Holography** □ ASA
AND MCDONNELL-DOUGLAS CORP.
□ Newport Beach, Calif. 4/70

AUGUST 1970

2 **High-Speed Photography** □ SOCI-
ETY OF MOTION PICTURE AND
TELEVISION ENGINEERS □ Denver,
Colo. 10/69

3-7 **Precision Measurements and
Fundamental Constants** □ IUPAP,
COMMITTEE ON DATA FOR SCIENCE
AND TECHNOLOGY OF THE INTL.
COUNCIL OF SCIENTIFIC UNIONS,
COMMITTEE ON FUNDAMENTAL
CONSTANTS OF THE US NATIONAL
ACADEMY OF SCIENCES AND NA-
TIONAL RESEARCH COUNCIL, NBS,
BUREAU INTERNATIONAL DE POIDS
ET MESURES □ Gaithersburg, Md.
1/70

5-7 **Applications of X-Ray Analysis** □
UNIV. OF DENVER □ Denver
3/70

6-15 **Antarctic Geology and Solid
Earth Physics** □ SCI. COM. ON
ANTARCTIC RES., INTL. UNION OF
GEOLOGICAL SCIENCES □ Oslo,
Norway 5/70

10-14 **New Techniques in Space As-
tronomy** □ INTL. ASTRONOMICAL
UNION □ Garching, Germany
6/70

10-14 **White Dwarfs** □ INTERNATIONAL
ASTRONOMICAL UNION □ St. An-
drews, Scotland 1/70

10-14 **Environmental Aspects of Nu-
clear Power Stations** □ IAEA □
New York, N. Y. 5/70

11-15 **Magnetic Recording** □ HUNGAR-
IAN OPTICAL, ACOUSTICAL AND
CINEMATOGRAPHIC SOCIETY □
Budapest 12/69

12-14 **External Galaxies and Quasitel-
lar Objects** □ INTERNATIONAL
ASTRONOMICAL UNION □ Upp-
sala, Sweden 1/70

12-16 □ AUSTRALIAN AND NEW ZEA-
LAND ASSOCIATION FOR THE AD-
VANCEMENT OF SCIENCE □ Port
Moresby, Papua and New Guinea
11/69

16-21 □ ACA □ Ottawa, Canada

17-21 **10th International Conference on
the Physics of Semiconductors** □
IUPAP □ MIT, Cambridge, Mass.
7/69

17-21 **Recovery of Uranium** □ IAEA □
Rio de Janeiro, Brazil 6/70

17-21 **Computers** □ COMM. ON COLLEGE
PHYSICS, ILL. INST. OF TECHNO-
LOGY □ Chicago 5/70

17-21 **Upper Atmospheric Currents and
Electric Fields** □ AIR FORCE
CAMBRIDGE RESEARCH LABORA-
TORIES, OFFICE OF NAVAL RE-
SEARCH, ENVIRONMENTAL SCIENCE
SERVICES ADMINISTRATION, NA-

TIONAL CENTER FOR ATMOSPHERIC
RESEARCH □ Boulder, Colo.
11/69

17-21 **Angular Correlation in Nuclear
Disintegration** □ IPPS, DUTCH
PHYSICAL SOCIETY □ Delft,
Netherlands 4/70

17-29 **Nuclear Structure** □ FEDERAL
COUNCIL FOR COORDINATION OF
RESEARCH, BORIS KIDRIČ INST. OF
NUCLEAR SCIENCES □ Herceg-
Novi, Yugoslavia 6/70

18-26 **International Congress on Acous-
tics** □ Budapest 3/70

18-28 □ INTERNATL. ASTRON. UNION □
Brighton, UK 4/70

19-21 **Astrodynamics** □ AAS-AMERICAN
INST. OF AERONAUTICS AND ASTRO-
NAUTICS □ Santa Barbara 3/70

23-29 • **Combustion Symposium** □ THE
COMBUSTION INSTITUTE □ Univ.
of Utah, Salt Lake City (N. W.
Ryan, 13th Intl. Symposium on
Combustion, Merrill Hall, Univ.
of Utah, Salt Lake City, Utah
84112) 7/70

24-26 **Radiation Effects in Semiconduc-
tors** □ IUPAP, AFCL, STATE UN-
IVERSITY OF NEW YORK AT ALBANY
□ Albany 10/69

24-26 **Energy and the Environment** □
OAK RIDGE ASSOCIATED UNIV., AEC
□ Oak Ridge, Tenn. 6/70

24-27 **2nd Inter-American Conference
on Materials Technology** □
SOUTHWEST RESEARCH INSTITUTE
□ Mexico City, Mexico 10/69

24-28 **Liquid Crystals** □ FRITZ HABER
INSTITUT, MAX PLANCK GESELL-
SCHAFT □ Berlin, Germany
2/70

24-29 **Analytical Chemistry** □ Buda-
pest, Hungary 5/70

25-28 **Chromosphere** □ Boulder, Colo.
5/70

26-29 **Small-Angle X-ray Scattering** □
ACA □ Graz, Austria 12/69

26-4 **High-Energy Physics** □ ORGANIZ-
ING COMM. □ Kiev, Ukrainian
SSR 2/70

27-29 **Transport Properties of Solids** □
AUSTRALIAN INSTITUTE OF PHYS-
ICS, IUPAP □ Sydney, Australia
2/70

30-2 **Preparation and Properties of
Electronic and Magnetic Mate-
rials for Computers** □ METAL-
LURGICAL SOC. OF AIME □ New
York, N. Y. 6/70

30-6 **Electron Microscopy** □ Grenoble,
France 8/69

31-3 **Solar Magnetic Fields** □ Paris
5/70

31-4 **Strength of Metals and Alloys** □
AMERICAN SOCIETY FOR METALS
□ Pacific Grove, Calif. 6/69

31-4 **Polarization Phenomena in Nu-
clear Reactions** □ IUPAP □ Univ.

of Wisconsin, Madison 1/70

- 31-4 **Dynamic Studies with Radioisotopes in Clinical Medicine and Research** □ IAEA □ Rotterdam, Netherlands 3/70
- 31-4 **Conference on Dynamics of Molecular Collisions** □ ORNL □ Oak Ridge, Tenn. 3/70
- 31-4 **Mass Spectroscopy** □ Brussels, Belgium 4/70
- 31-4 **Plasma Physics and Controlled Thermonuclear Research** □ Rome 6/70
- 31-5 **Heat Transfer** □ SOCIÉTÉ FRANÇAISE DES THERMICIENS □ Versailles, France 1/70

SEPTEMBER 1970

- 1-3 **Nuclear Power in 1970** □ ANS □ Williamsburg, Va. 2/70
- 1-3 **Determination of Fundamental Spectroscopic Data** □ IAU □ London, UK 5/70
- 1-4 **Applications of Transport Theory** □ Oxford, UK 6/70
- 1-6 **Magnetic Resonances and Related Phenomena** □ COLLOQUE AMPERE □ Bucharest, Rumania 2/70
- 2-9 □ BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE □ Durham, UK 11/69
- 4-10 **Low-Temperature Physics** □ IUPAP □ Kyoto, Japan 6/69
- 6-11 **Hyperfine Interactions Detected by Nuclear Radiation** □ IUPAP □ Rehovoth, Israel 3/70
- 7-9 **Ion Implantation** □ IPPS □ Reading, UK 6/70
- 7-9 **Computational Physics** □ IPPS □ London, UK 5/70
- 7-10 **Quantum Electronics** □ INSTITUTE OF ELECTRONICS COMMUNICATION ENGINEERS OF JAPAN □ Kyoto 7/69
- 7-11 □ BRITISH NATL. COMMITTEE ON DATA FOR SCIENCE AND TECHNOLOGY 3/70
- 7-11 **Cybernetics** □ ASSOCIATION INTERNATIONALE CYBERNETIQUE □ Namur, Belgium 3/70
- 7-11 **Controlled Fusion and Plasma Physics** □ EPS □ Rome, Italy 4/70
- 7-11 **Microwave and Optical Generation and Amplification** □ Amsterdam, Netherlands 6/70
- 7-11 **Radioactive Wastes** □ IAEA EUROPEAN NUCLEAR ENERGY AGENCY □ Aix-en-Provence, France 4/70
- 8-10 **Optical Techniques for Investigations in the Upper Atmosphere** □ IPPS □ Exeter, UK 6/70

- 8-12 **Molecular Structure and Spectroscopy** □ OHIO STATE UNIVERSITY □ Columbus, Ohio 3/70
- 9-11 **Methods in Radiochemistry** □ AUSTRIAN CHEM. SOC. □ Graz, Austria 4/70
- 10, 11 **Magnetic Resonance in Nonconductors** □ BRITISH RADIOSPECTROSCOPY GROUP □ Nottingham, UK 1/70
- 11-17 **Education of Secondary-School Physics Teachers** □ IUPAP, HUNGARIAN NATIONAL COMMITTEE ON PHYSICS EDUCATION □ Eger, Hungary 11/69
- 14-16 **Photoelectron Spectroscopy** □ IPPS, CHEMICAL SOCIETY □ Oxford, UK 2/70
- 14-18 **Microscopy** □ ROYAL MICROSCOPICAL SOCIETY □ London, UK 4/70
- 14-18 □ INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES □ Rome 11/69
- 14-18 **Organic Solid-State Chemistry** □ INTL. UNION OF CRYSTALLOGRAPHY, IUPAC □ Rehovoth, Israel 3/70
- 14-18 **Physics of Noncrystalline Solids** □ ORGANIZING COMMITTEE OF THE CONFERENCE ON PHYSICS OF NONCRYSTALLINE SOLIDS □ Sheffield, UK 11/69
- 14-19 **Magnetism** □ IUPAP □ Grenoble, France 10/69
- 14-27 **INTERNATIONAL ASSOCIATION OF THE PHYSICAL SCIENCES OF THE OCEAN** □ Tokyo, Japan 2/70
- 15, 16 • **Laser in Science and Technology** □ USAF OFFICE OF SCIENTIFIC RES., UNIV. OF WASH. AEROSPACE RES. LAB. □ Univ. of Wash., Seattle, Wash. (Office of Short Courses and Conferences, 327 Lewis Hall, Univ. of Wash., Seattle, Wash. 98105) 7/70
- Topics: Generation of nonlinear effects; plasma production; heating and diagnostics; industrial cutting and welding; communications; biomedical uses and holography.
- 15-18 **Gas Discharges** □ IPPS, INSTITUTE OF ELECTRICAL ENGINEERS (UK) □ London 12/69
- 15-18 **Solid-State Devices** □ IPPS, INST. OF ELEC. ENGINEERS, INST. OF ELECTRONIC AND RADIO ENGINEERS, IEEE, UK AND REPUBLIC OF IRELAND SEC. □ Univ. of Exeter, UK 5/70
- 17-19 • **High-Power Ultrasonics** □ THE GOVERNMENT OF STYRIA, ÖSTERREICHISCHE PHYSIKALISCHE GESELLSCHAFT □ Graz, Austria (B. Langenecker, A-8253 Waldbach, Austria) 7/70
- 18, 19 **Solid State Physics** □ Bucharest, Rumania 2/70
- 21-23 **Temperature Measurement** □ IPPS □ Coventry, UK 2/70
- 21-23 **Magnetic Thin Films** □ IUPAP □ Prague, Czechoslovakia 1/70
- 21-24 **Engineering in the Ocean En-**

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A CONTEST

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The purpose of this competition is to focus attention on the theme of the 1970 Annual Meeting of the Corporate Associates and Society Officers of the American Institute of Physics. Readers of PHYSICS TODAY may enter photographs in three categories, which represent the subjects to be discussed at the October meeting. These categories are:

Physics and the Environment

Physics and Energy Sources

Physics and the Life Sciences

Entries will be judged on their success in demonstrating the role of physics in the modern world within one of the three categories, as well as on their artistic quality and originality in choice and treatment of the subject.

There will be prizes for each category, plus another prize for a color photograph if one is chosen for the cover of the December 1970 issue of PHYSICS TODAY. The cover photograph will be eligible for one of the other prizes. Details of the prizes will be announced in the August issue of PHYSICS TODAY.

Rules

1. Entries must represent the work of readers of PHYSICS TODAY. Employees of the American Institute of Physics or members of their families are not eligible.
2. No individual can submit more than two entries for each category, one in color and one in black and white — a total of six possible entries for each contestant. Please attach your name, address, and the appropriate category to the back of each print or the mount of each slide.
3. Photographs taken by professional photographic services, such as those available in major governmental, industrial and university laboratories, are not eligible. The emphasis of this competition is on the amateur photographer who is a reader of PHYSICS TODAY and on his photographs, taken either at work or in his spare time.
4. Photographs published in other publications are not eligible.
5. Photographs may have been taken at any time and at any place.
6. Photographs may be **either black and white or in color**; they must all be still photographs.
7. Color photographs may be either prints or positive transparencies. Color and black-and-white prints should be at least 8" x 10" in size. Black-and-white and color prints will become the permanent property of the American Institute of Physics. Color slides will be returned to the owner if requested and if accompanied by a stamped, self-addressed envelope or mailing container.
8. The American Institute of Physics automatically holds publication rights for the first publication of all photographs entered in the competition as well as rights of reproduction.
9. The closing date for all entries shall be a postmark of midnight on **Tuesday, 1 September 1970.**
10. The decision of the judges shall be final.
11. The American Institute of Physics assumes no responsibility for the safety of slides or prints.



Please send all entries to:
Photo Contest
Physics Today
American Institute of Physics
335 East 45th Street
New York, N. Y. 10017

vironment ☐ IEEE PANAMA CITY SECTION OF REGION III, IEEE OCEANOGRAPHY COORDINATION COMMITTEE ☐ Panama City, Fla. 11/69

21-25 Energy Conversion Engineering ☐ AMER. INST. OF AERONAUTICS AND ASTRONAUTICS ☐ Las Vegas, Nev. 5/70

22-24 Physics and Nondestructive Testing ☐ Chicago 3/70

22-24 Vitreous State ☐ FARADAY SOCIETY ☐ Bristol, UK 1/70

22-25 Reaction Transition States ☐ SOCIÉTÉ DE CHIMIE PHYSIQUE ☐ Paris 8/69

22-29 ☐ IAEA ☐ Vienna 2/70

23, 24 Electron Device Techniques ☐ IEEE ☐ New York, N.Y. 4/70

23-25 Crystal Growth and Epitaxy ☐ SWISS CRYSTALLOGRAPHIC SOCIETY AND COMITÉ INTERNATIONAL DE LA CROISSANCE CRISTALLINE ☐ Zurich 4/70

23-25 High-Energy Physics ☐ IPPS ☐ Durham, UK 3/70

23-25 • Gaussian Wave Functions ☐ UNIV. OF NOTTINGHAM ☐ Nottingham, UK (R. L. Hudson, Dept. of Mathematics, Univ. of Nottingham, University Park, Nottingham NG7 2RD, UK) 7/70

28-30 Thermal Conductivity ☐ DYNATECH AND ARTHUR D. LITTLE, INC. ☐ Boston 5/70

28-30 Metastable Metallic Alloys ☐ IUPAP, EUR. PHYS. SOC., YUGOSLAV COUNCIL OF SCIENCE ☐ Brela, Yugoslavia 3/70

28-2 Proton Linear Accelerators ☐ Batavia, Ill. 6/70

28-3 ☐ GERMAN PHYSICAL SOCIETY ☐ Hanover

29-1 Conference on Advances in Polymer Science and Technology III: Chemistry of Liquid Polymers and Thermoplastic Copolymers ☐ INSTITUTION OF RUBBER INDUSTRY ☐ London 11/69

29-2 ☐ OSA ☐ Hollywood, Fla.

OCTOBER 1970

1, 2 Thermophysical Properties ☐ AMER. SOC. OF MECHANICAL ENGINEERS ☐ Newton, Mass. 5/70

4-10 International Astronautical Congress ☐ INTERNATIONAL ASTRONAUTICAL FEDERATION ☐ Constance, Germany 3/70

5-7 Gallium Arsenide and Related Compounds ☐ TECHNISCHE HOCHSCHULE, IPPS, US AIR FORCE ☐ Aachen, Germany 4/70

5-9 Plutonium Conference ☐ Santa Fe, New Mexico 2/70

5-9 Nuclear Power Stations ☐ IAEA, US AEC, UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE ☐ Vienna, Austria 4/70

5-10 Thin Films ☐ SOCIÉTÉ FRANÇAISE DES INGENIEURS ET TECHNICIENS DU VIDE ☐ Cannes, France 5/70

7, 8 High-Temperature Science ☐ FRANKLIN INSTITUTE RES. LABS ☐ Philadelphia, Pa. 5/70

8, 9 ☐ APS OHIO SECTION ☐ Granville, Ohio 4/70

11-17 Physics and Chemistry of Semiconductor Heterojunctions and Layer Structures ☐ IUPAP, EUR. PHYS. SOC. ☐ Budapest 3/70

12-14 Electrical Insulation and Dielectric Phenomena ☐ NATL. ACAD. SCI., NATL. RES. COUNCIL ☐ Pocono Manor, Pa. 6/70

13 Superconductivity and Magnetism ☐ IPPS ☐ London, UK 6/70

15-17 ☐ APS DIVISION OF NUCLEAR PHYSICS ☐ Houston, Texas 4/70

16, 17 • ☐ NEW ENGLAND SECTION OF APS ☐ Univ. of Maine, Orono (T. Hess, Univ. of Maine, Orono, Me. 04473) [9/70] 7/70

Topics: Amorphous matter; near future of physics.

19-24 Material Testing ☐ Budapest 2/70

19-24 Statistical Mechanics ☐ IUPAP ☐ Mexico 1/70

19-24 Betatrons ☐ Bucharest, Rumania 6/70

20-23 Vacuum Symposium ☐ AVS ☐ Washington, D.C. 3/70

20-23 Arc Symposium—Gaseous Electronics ☐ UNITED AIRCRAFT ☐ Hartford, Conn. 8/69

21-23 Ultrasonics ☐ IEEE SONICS AND ULTRASONICS GROUP ☐ San Francisco 1/70

26-28 ☐ S O F R ☐ Princeton, N.J. 6/70

26-29 ☐ INSTRUMENT SOCIETY OF AMERICA ☐ Philadelphia 3/70

26-30 Nuclear Techniques in the Measurement and Control of Environmental Pollution ☐ IAEA ☐ Salzburg, Austria 5/70

28-30 Electron Devices ☐ IEEE ☐ Wash., D. C. 12/69

28-30 Planetology & Space Mission Planning ☐ N.Y. ACADEMY OF SCIENCES ☐ New York, N.Y. 5/70

30, 31 Theoretical Physics ☐ Hoboken, N.J. 6/70

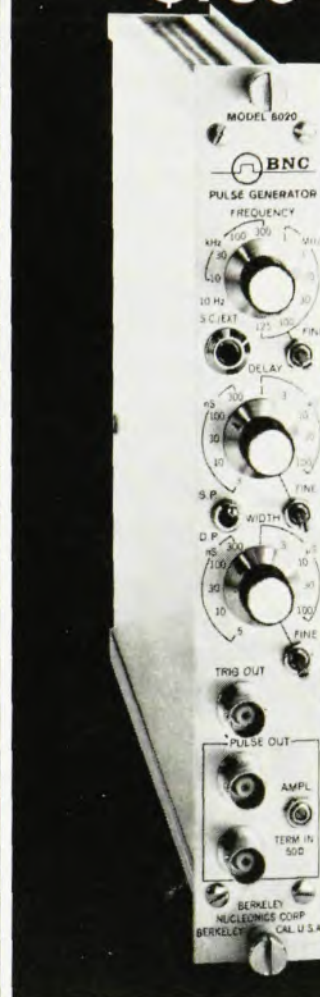
NOVEMBER 1970

2-6 Electric Contact Phenomena ☐ Chicago 5/70

3-6 ☐ ASA ☐ Houston, Tex.

3-6 Health Physics Aspects of Nu-

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Proceedings of the
Boulder Conference on

HIGH ENERGY PHYSICS

A special meeting of the Division of Particles and Fields of the APS, August 18-22, 1969

Edited by K. T. Mahanthappa,
W. D. Walker, and W. E. Brittin

1970, 623pp, \$15.00

CONTENTS: Review Lectures by R. Diebold, H. DeStaebler, E. Paschos, S. Wojcicki, L. Wolfenstein, R. Plano, C. Y. Chang, A. L. Read, M. O. Larson, M. Derrick, H. Lipkin, R. Blankenbecler, A. Krisch, L. Durand; and related discussions. Discussion sessions (some with summaries) and abstracts of contributed papers.

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Applications are invited for a Postdoctoral Fellowship in the field of fluorescence decay times of molecules in the vapour phase, and in the construction of a kinetic spectrometer for the investigation of short-lived intermediates in the photochemistry of aromatic molecules in the gas phase. The position would suit a physicist or chemist with experience in electronics and computational techniques. Salary in the range up to £1,605 according to age and experience with F.S.S.U. benefits where applicable. Applicants should write to **Dr. David Phillips, Department of Chemistry, The University, Southampton SO9 5NH, U.K.**, enclosing a brief curriculum vitae quoting ref P.T.

ELECTRICAL ENGINEER or ENGINEERING PHYSICIST

An electrical engineer or engineering physicist is required as soon as possible for the design and testing of special RF and fast pulse electronic equipment for beam chopping, beam bunching and fast beam deflection. This equipment will be part of the beam injection system for the Centre Region Model which is an experimental prototype for the main accelerator at TRIUMF. A recent graduate with suitable interests and training would be acceptable. Replies should be addressed to **Director, TRIUMF, University of British Columbia, Vancouver 8, B.C.**

LAVAL UNIVERSITY

Post-doctoral fellowship (salary \$6,000 tax-free, \$7,200 for married fellow with child) or graduate studentship (\$3,000. - \$3,600) available September 1970, in low energy theoretical nuclear physics. Current work includes sequential decay and reactions of light nuclei. Send resumé to: **Dr. Peter Swan, Physics Department, Laval University, Québec 10, P. Qué., Canada.**

Wanted: University employed physicist to assist in the bringing to final form the manuscript for an introductory physics (with calculus) text. Must have had experience teaching introductory courses and preferably some writing experience as well. Write to Box 770A, Physics Today; state present position and details of experience.

The AIP Information Division has an opening for a **theoretical solid-state physicist** in information analysis of physics articles (Ph.D. or equivalent required). Starting salary range is \$11,000-\$12,000 per year. No previous experience in information activities required. Please send resumes in confidence to **Dr. Bruce M. Foreman, Jr., American Institute of Physics.**

Position Wanted

Ph.D. (Nuclear-Experimental—1964)—20 research publications-teaching experience—also interested in Cosmic Ray Physics, Plasma Physics, Optics and Microwave Physics.—seeks a non-temporary research and/or teaching position. **Reply Box 770, Physics Today, 335 East 45 St., N. Y., N. Y. 10017.**

clear-Facility Siting ☐ HEALTH PHYSICS SOC. ☐ Idaho Falls, Id. 6/70

4-6 Nuclear Science Symposium ☐ IEEE ☐ New York 6/69

4-7 ☐ APS PLASMA PHYSICS DIVISION ☐ Washington, D. C.

8-12 ☐ SOCIETY OF EXPLORATION GEO-PHYSICISTS ☐ New Orleans 5/70

12, 13 Engineering Systems ☐ IEEE ☐ Winter Park, Florida 5/70

15-19 ☐ ANS, ATOMIC INDUSTRIAL FORUM, ATOMIC FAIR ☐ Washington, D. C. 6/69

15-19 Magnetism and Magnetic Materials ☐ IEEE ☐ Miami Beach, Fla. 12/69

16-18 Solar Activity ☐ AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS ☐ Huntsville, Ala. 3/70

17-20 Magnetism and Magnetic Materials ☐ AIP, IEEE ☐ Miami Beach, Fla. 12/69

18-20 Analytical Symposium ☐ New York, N. Y. 5/70

23-25 Fluid Dynamics ☐ APS ☐ Charlottesville, Va. 6/70

23-25 ☐ APS ☐ Seattle, Wash. 6/70

23-25 ☐ APS ☐ New Orleans, La. 4/70

23-27 ♦ Physical and Biological Radiation Detectors ☐ IAEA ☐ Vienna, Austria 5/70

30-5 ☐ RADIOLOGICAL SOCIETY OF NORTH AMERICA ☐ Chicago, Ill. 2/70

DECEMBER 1970

6-11 ☐ AIR POLLUTION CONTROL ASSOCIATION ☐ Wash., D.C. 2/70

7-10 ☐ AAS ☐ Tampa, Fla. 4/70

7-10 ☐ AMERICAN GEOPHYSICAL UNION ☐ San Francisco 3/70

14-18 Relativistic Astrophysics ☐ UNIV. OF TEXAS ☐ Austin, Texas 4/70

26-31 ☐ AMERICAN ASSOC. FOR THE ADVANCEMENT OF SCIENCE ☐ Chicago 6/70

28-31 ☐ APS ☐ Stanford, Calif.

JANUARY 1971

5-7 Solid-State Physics ☐ IPPS ☐ Univ. of Manchester 6/70

25-27 Aerospace Sciences ☐ AMER. INST. OF AERONAUTICS AND ASTRONAUTICS ☐ New York, N. Y. 5/70

FEBRUARY 1971

1-4 ☐ APS-AAPT ☐ New York

NEW LISTING OF SHORT COURSES AND SCHOOLS

13 JULY-14 AUGUST

Pulsars and Other Late Stages of Stellar Evolution ☐ UNIV. OF COLO. ☐ Boulder, Colo. (M. S. Ueberoi, Dept. of Aerospace Engineering Sciences, Univ. of Colo., Boulder, Colo. 80302)

Topics: White dwarfs; pulsars; Crab pulsar; oblique magnetic rotator and other models; stable and unstable configurations of hyperdense stars; black holes; mechanisms of loss of the energy and angular momentum of rotation; comparison with observation; configuration and decay of magnetic fields; relations between supernovae, x-ray and radio sources and pulsars, and between pulsars and quasars.

13 JULY-14 AUGUST

Quantum Statistical Mechanics ☐ UNIV. OF COLO. ☐ Boulder, Colo. (M. S. Ueberoi, Dept. of Aerospace Engineering Sciences, Univ. of Colo., Boulder, Colo. 80302)

Topics: Fermi-Dirac and Einstein-Bose statistics and the corresponding distribution functions for gases for low and high degeneracy; application to the theory of metals; the Bose condensation with application to liquid helium; completely degenerate neutron gas.

3-7 AUGUST

A System Approach to the New City ☐ SCHOOL OF ENG., OAKLAND UNIV. ☐ Rochester, Mich. (K. A. Meade, Asst. to Dean, School of Engineering, Oakland Univ., Rochester, Mich. 48063)

Topics: Urban ekistics and the political, sociological, engineering, economic and management-science aspects of the urban problem.

1-5 ☐ ACA ☐ Columbia, S.C. 6/70

MARCH 1971

1-3 Particle Accelerators ☐ IEEE ☐ Chicago 4/70

29-1 ☐ APS ☐ Cleveland, Ohio

APRIL 1971

5-8 ☐ OSA ☐ Tucson, Ariz.

5-8 Atomic and Molecular Physics ☐ IPPS ☐ York, UK 3/70

5-8 Low-Mobility Materials ☐ TECH-NION (ISRAEL INST. OF TECHNOLOGY) ☐ Eilat, Israel 5/70

12-16 ☐ AMERICAN GEOPHYS. UNION, NATL. ACAD. SCI., NATL. RES. COUNCIL ☐ Wash., D. C. 3/70

13-15 Magnetism ☐ IEEE MAGNETICS GROUP ☐ Denver, Colo. 10/69

18-21 • Neutron Sources ☐ SAVANNAH RIVER SECTION, ISOTOPES AND RADIATION DIV. OF ANS, SAVANNAH RIVER OPERATIONS OFFICE, AEC ☐ Augusta, Georgia (E. J. Hennelly, Savannah River Lab., Aiken, S. C. 29801) [10/70] 7/70

Topics: Production of neutron sources; uses in industry, in medicine and in the exploration and protection of natural resources.

18-23 Geoscience Electronics ☐ IEEE ☐ Wash., D. C. 2/70

20-23 ☐ ASA ☐ Washington, D. C. 7/69

26-28 Thermophysics Conference ☐ AMERICAN INST. OF AERONAUTICS AND ASTRONAUTICS ☐ Tullahoma, Tenn. 6/70

26-29 ☐ APS ☐ Washington, D. C.

MAY 1971

9-13 ☐ RADIATION RESEARCH SOCIETY ☐ Boston 2/70

16-20 Microwaves ☐ IEEE ☐ Chicago 4/70

JUNE 1971

1-4 Laser Engineering & Applications ☐ IEEE ☐ Wash., D.C. 5/70

9-11 • Carbon-13 ☐ LOS ALAMOS SCIENTIFIC LAB, AEC, ASSOC. WESTERN UNIVS. ☐ Los Alamos, N. M. (E. S. Robinson, P. O. Box 1663, Los Alamos, N. M. 87544) 7/70

Topics: Enrichment and synthesis; nuclear magnetic resonance; biological effects and applications.

13-17 ☐ ANS ☐ Boston 8/69

13-19 8th World Petroleum Congress ☐ Moscow 10/69

14-17 Environmental Pollutants ☐ ASSN. OF OFFICIAL ANALYTICAL CHEMISTS, IUPAC, CHEMICAL INST. OF CANADA, AGRICULTURAL INST. OF CANADA, NATL. RES. COUNCIL OF CANADA ☐ Ottawa, Canada 5/70

14-18 Molecular Structure and Spectroscopy ☐ OHIO STATE UNIV. ☐ Columbus, Ohio 3/70

17-19 ☐ AAPT ☐ Beloit, Wisc.

20-23 Nuclear Reactors and Radioisotopes ☐ CANADIAN NUCLEAR ASSOCIATION ☐ Montreal 11/69

21-23 Fluid and Plasma Dynamics ☐ AMERICAN INST. OF AERONAUTICS AND ASTRONAUTICS ☐ Burlingame, Calif. 6/70

21-24 Temperature ☐ AIP, INSTRUMENT SOC. OF AMERICA, NBS ☐ Wash., D.C. 5/70

21-25 ☐ HEALTH PHYSICS SOCIETY ☐ New York 6/69

JULY 1971

5-7 Rare Earths and Actinides ☐ IPPS ☐ Durham, UK 2/70

5-9 International Conference on Crystal Growth ☐ INTERNATIONAL CRYSTAL GROWTH COMMITTEE, INTL. UNION OF CRYSTALLOGRAPHY, IUPAP, IUPAC ☐ Marseille, France 1/70 ☐