

MEETINGS

The Basic Sciences

Yeshiva University's Belfer Graduate School of Science will hold a conference on recent developments in the basic sciences on October 14 and 15. The program will be scheduled as follows: Physics—October 14 (morning) M. Goldhaber, J. Schwinger, H. Primakoff, *Chairman*; (afternoon) C. N. Yang, T. Gold, E. W. Montroll, *Chairman*. Mathematics—October 15 (morning) S. S. Chern, O. Zariski, A. A. Albert, *Chairman*; (afternoon) A. Beurling, D. Spencer, M. M. Morse, *Chairman*.

Persons wishing to attend the conference should contact A. Gelbart, Dean, Belfer Graduate School of Science, Yeshiva University, Amsterdam Avenue and 186th Street, New York 33, N. Y.

Cosmic Rays

The International Union of Pure and Applied Physics has been invited by the Indian Department of Atomic Energy to hold the eighth International Conference on Cosmic Rays in Jaipur. To be held from December 2 to 14, the meeting expects to devote ten days to technical sessions, covering the following broad fields: (1) primary cosmic radiation, including composition, energy spectrum, origin, prehistory, and cosmological and astrophysical aspects; (2) solar particle radiation, interplanetary fields and plasmas, modulation phenomena, and time variations; (3) phenomena at energies greater than 30 BeV and the properties of extensive air showers; and (4) cosmic-ray muon and neutrino physics. A number of additional invited reviews in fields closely related to the conference topic will include geomagnetism and ionospheric phenomena in relation to solar activity, radiation belts, solar and galactic radio astronomy, and the properties of elementary particles and their interactions as studied with accelerators.

Authors of contributed papers are requested to restrict themselves to the essential physics, dealing with experimental and theoretical details only when they are necessary for understanding. It is planned to provide working group meetings to discuss details involving methodology, errors, construction and calibration of equipment, and the calculations and approximations employed.

All correspondence regarding the meeting should be directed to Dr. R. R. Daniel, Secretary, Organizing Committee for the International Conference on Cosmic Rays, Tata Institute of Fundamental Research, Colaba, Bombay 5, India.

Relativistic Astrophysics

An open international symposium on gravitational collapse and other topics in relativistic astrophysics will be held in Dallas from December 16 through 18. The meeting will center about the nature of strong radio sources, such as 3C273, and the Hoyle-Fowler theory. Tentative sessions are listed below:

- (1) Welcome Address (L. V. Berkner), Theory of Collapse (F. Hoyle), J. R. Oppenheimer, *Chairman*;
- (2) Optical Identification of Extragalactic Radio Sources (T. A. Matthews), Spectroscopic Properties of Radio Sources (J. Greenstein), A. Sandage, *Chairman*;
- (3) Geometry of Radio Sources (C. Hazard), Variability of 3C273 (H. Smith), J. G. Bolton, *Chairman*;
- (4) Theories on the Origin of Radio Sources (V. L. Ginzburg), The Superdense Stars (E. Salpeter), Supercritical Conditions and the Issue of the Final State (J. Wheeler), F. A. E. Pirani, *Chairman*;
- (5) Supernova Collapse (W. Fowler), Neutrino Emission in Collapse (H. Y. Chiu), P. Morrison, *Chairman*; and (6) Summary (P. G. Bergmann), Final Discussion, M. Schwarzschild, *Chairman*.

Further information can be obtained from Ivor Robinson, Southwest Center for Advanced Studies, PO Box 8478, Dallas, Tex.

Instruments

The British Institute of Physics and the Physical Society has announced that its 1964 exhibition of scientific instruments and apparatus will be held January 6 to 9 in the Halls of The Royal Horticultural Society, Vincent Square, London S.W.1, England.

Semimetals

On January 21, 1964, the day before the annual American Physical Society New York meeting opens, a conference on semimetals will be held at Columbia University. The meeting will be an APS Topical Conference open to all members of the Society, and will cover the physical properties of semimetals. Plans are for the program to consist entirely of contributed papers and to provide ample discussion time.

The deadline for receipt of abstracts is October 21. Since these will be published in the APS *Bulletin*, it is necessary that they follow the style instructions listed in any issue of the *Bulletin*. In addition, an accompanying "amplification" supporting the paper will be welcomed by the organizing committee as an aid in selecting contributions.

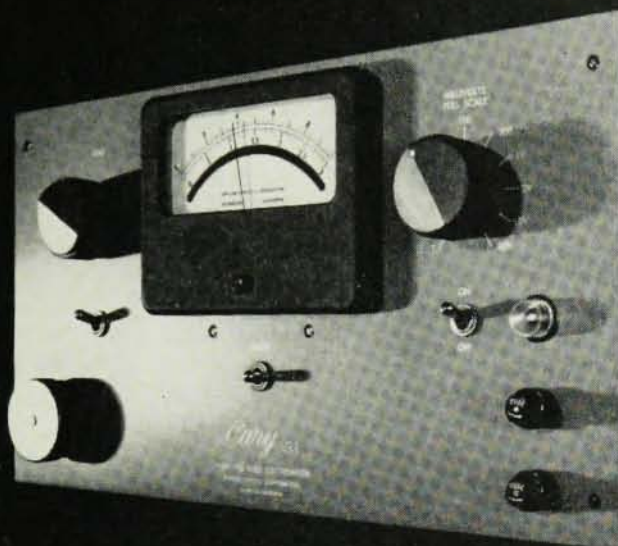
Both abstracts and any inquiries regarding the conference should be sent to S. H. Koenig, IBM Watson Laboratory, 612 West 115th Street, New York 25, N. Y.

Superconductors

The Metallurgical Society of the American Institute of Mining, Metallurgical, and Petroleum Engineers has announced that it will present a special program on

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the physical metallurgy of semiconductors during the AIME 93rd annual meeting. It will take place on February 18, 1964, at the Hotel Astor in New York City, under the sponsorship of the Society's Institute of Metals Division and Committees on Physical Metallurgy and Electronic Materials.

Papers are invited on phase-diagram work on superconducting materials, the effect of metallurgical variables (heat treatment, deformation, applied stress, etc.), and the relationship between metallurgical structure (as observed by optical and electron microscopy, x-ray diffraction, etc.) and superconducting properties. The announcement states that papers are not limited to high-field superconductors.

Abstracts, 200-300 words, in duplicate, are due by October 31. These and all correspondence should be sent to C. D. Graham, Jr., General Electric Company Research Laboratory, Schenectady, N. Y.

Rare Earths

The physics, chemistry, metallurgy, and ceramics of the rare earths and related elements will be discussed at the fourth Rare Earth Research Conference, which meets April 22-25, 1964, in Phoenix, Ariz. The meeting, which will also cover the compounds and alloys of these elements, will be restricted to persons actively engaged in research falling within the scope of the conference.

Abstracts, due by November 4, and requests for additional information should be addressed to the conference chairman, Dr. LeRoy Eyring, Department of Chemistry, Arizona State University, Tempe, Ariz.

Micromasurements

A fourth informal conference on vacuum microbalance techniques will take place May 7 and 8, 1964, at the Mellon Institute in Pittsburgh. The program is expected to include theory, new types of balances, difficulties, associated equipment, other microweighing methods, and applications. Titles and abstracts of contributed papers are due by March 26. These, and requests for further information, should be sent to Mr. F. A. Brassart, Westinghouse Research and Development Center, Beulah Road, Churchill Borough, Pittsburgh 35, Pa.

Quasi-Optics

Electromagnetic phenomena and techniques at wavelengths that are small compared to guiding or perturbing structures will be the topic of the fourteenth in the Polytechnic Institute of Brooklyn series of international symposia. To be held June 8-10, 1964, at the Statler-Hilton Hotel in New York City, the meeting will be organized by the Brooklyn Polytech Microwave Research Institute, in cooperation with the Institute of Electrical and Electronics Engineers. The Air Force Office of Scientific Research, the Office of Naval