

# Association Affairs

## Programs Planned for the AAAS Chicago Meeting

Section and society programs in anthropology, psychology, social and economic sciences, and history and philosophy of science to be presented at the Chicago meeting are given here. Programs in mathematics, physics, chemistry, astronomy, geology and geography, biological sciences, medical sciences, and agriculture have been previously announced [*Science* **130**, 1196, 1258, 1344 (1959)].

### Anthropology

*Section H.* Vice-presidential address: "Archeology Today and Tomorrow," by John C. McGregor, University of Illinois; 28 Dec.; James L. Giddings, Brown University, presiding.

Symposium: "Biology and History in Archeology"; arranged by John C. McGregor; 28 Dec.; Donald Lathrap, University of Illinois, presiding. Papers on the historical knowledge gained through the analysis of molluscan shells once associated with the habitations of Indians (Max R. Matteson, University of Illinois); plant and culture movements in the Southwest (Hugh Cutler, Missouri Botanical Garden); the application of tree-ring dating to problems in archeology (Bryant Bannister, University of Arizona); the role of the zoologist in archeological interpretation (Charles A. Reed, University of Illinois); the relationship of archeology to history (J. Joe Bauxar, Rockford College).

There will be two sessions of contributed papers; 28 and 29 Dec.; Dwight B. Heath, Brown University, presiding.

Three-session symposium: "Technology as a Backstop to Anthropology and Archeology"; 29 and 30 Dec.; arranged by Ray Winfield Smith, Archaeological Institute of America, who will preside.

Part I. Papers on the role of trace-element geochemistry in archeology and anthropology (Karl K. Turekian, Yale University); microscopy in anthropology and archeology (Walter C. McCrone, Walter C. McCrone Associates, Chicago); study of ancient objects by means of neutron beams (Edwards V. Sayre, Brookhaven National Laboratory); technology from the point of view of the

museum laboratory (William J. Young, Museum of Fine Arts, Boston).

Part II. Papers on metallurgy in the ancient world (William Campbell Root, Bowdoin College); chemical methods of trace analysis (Arnold M. Hartley, University of Illinois); x-ray spectroscopy as an analytical tool (L. S. Birks, U.S. Naval Research Laboratory); the application of thermoluminescence to problems in archeology (George C. Kennedy and Leon Knopoff, University of California).

Part III. Papers on techniques under development at the Research Laboratory for Archaeology and the History of Art (E. T. Hall, Oxford University); recent refinements in the C<sup>14</sup> technique (Edwin A. Olson, Columbia University); electron microbeam probe studies of art objects (Norman Peterson and R. E. Ogilvie, Massachusetts Institute of Technology); expanding horizons of anthropology and archeology: the promise of technology (Ray Winfield Smith).

### Psychology

*Section I.* Symposium: "Verbal Learning and Meaningfulness"; 29 Dec.; arranged by B. J. Underwood, Northwestern University, who will preside. Papers will be presented on a reevaluation of a scale of meaningfulness (E. J. Archer, University of Wisconsin); learning as a function of meaningfulness (B. J. Underwood); retention as a function of meaningfulness (L. J. Postman, University of California, Berkeley).

Vice-presidential address: "Some Neglected Possibilities of Communication," by Frank A. Geldard, University of Virginia; 29 Dec.; Clifford T. Morgan, University of Wisconsin, presiding.

Symposium: "Unconscious Processes"; 30 Dec.; arranged by C. W. Eriksen, University of Illinois, who will preside. Papers on discrimination without awareness (C. W. Eriksen); the problem of awareness (Don E. Dulany, University of Illinois); studies of dream deprivation (Charles Fisher, Mount Sinai Hospital); subliminal activation (G. S. Klein, New York University).

Symposium: "Brain Function and Learning"; 30 Dec.; arranged by W. D. Neff, University of Chicago, who will preside. Papers on somatic cortex and

learned somesthetic discriminations (I. T. Diamond, Duke University); temporal cortex and learned auditory discriminations (J. M. Goldberg, University of Chicago); type of response as a central nervous system variable (R. A. McCleary, University of Michigan); the effects of mammillothalamic tractotomy on retention of conditioned avoidance responses and learned visual discrimination (G. J. Thomas, University of Illinois).

Section I is a cosponsor of the four-session symposium of the American Psychiatric Association; "Roots of Behavior: Animal Behavior"; 28 and 29 Dec.; reported in the previous issue of *Science* under Medical Sciences.

### Social and Economic Sciences

*Section K.* Symposium: "World Population and International Relations"; jointly with the National Institute of Social and Behavioral Science, the American Economic Association, and the Population Association of America; 27 Dec.; arranged by Donald P. Ray, National Institute of Social and Behavioral Science, George Washington University, with William S. Vickrey, Columbia University and the American Economic Association, presiding. Papers will be presented on demographic factors in European diplomacy (Robert Strausz-Hupé, University of Pennsylvania); population and world economic development (Joseph J. Spengler, Duke University); vice-presidential address of Section K: demographic dimensions of world politics (Philip M. Hauser, University of Chicago).

There will be two sessions for contributed papers; 30 and 31 Dec.; Donald P. Ray, presiding.

*American Political Science Association.* Invited papers: "Scientific Knowledge and Public Policy-making"; cosponsored by AAAS Section K; 28 Dec.; arranged by James A. Robinson, Northwestern University, who will preside. Papers on designing systems for governmental decision-making in science (Richard L. Meier, Harvard University and Mental Health Research Institute, University of Michigan); scientists and public policy (H. Burr Steinbach, University of Chicago); science and international policy (Eugene Rabinowitch, University of Illinois, and editor, *Bulletin of Atomic Scientists*). Discussants: Marbury B. Ogle, Jr. (Purdue University), Duncan MacRae, Jr. (University of Chicago), and Harold D. Lasswell (Yale University).

*American Society of Criminology.* There will be four sessions of invited papers; 28 and 29 Dec.; arranged by Donal E. J. MacNamara, New York Institute of Criminology. Session I: "Psychiatry and Criminology"; Marcel

Frym, Hacker Psychiatric Foundation, chairman. Session II: "Problems in Police Administration"; Franklin M. Kreml, Northwestern University, chairman. Session III: "Research and Training in Criminology"; Peter Lejins, University of Maryland, chairman. Session IV: "Rehabilitation, Penology, and Criminology"; Vernon Fox, Florida State University, chairman.

Annual awards and memorial luncheon; 29 Dec.; Donal E. J. MacNamara, presiding. Award recipient: The Most Reverend Bernard J. Sheil, auxiliary bishop of Chicago, and chairman, Illinois Committee to Abolish Capital Punishment.

*American Sociological Association.* Symposium: "Use of Computers in Simulation of Social Behavior"; cosponsored by AAAS Section K; 28 Dec.; arranged by James S. Coleman, Johns Hopkins University, who will preside. Papers will be presented on a social influence process and its consequences (William McPhee, R. Smith, and S. Ferguson, Columbia University); direct factor analysis of sociometric data (Duncan MacRae, University of Chicago); dynamics of the behavior of a business firm (James G. March, Carnegie Institute of Technology); continuity of relationships among organizations imbedded in a communication network: assimilation study (Austin G. Hoggatt, University of California, Berkeley).

Symposium: "Trends in Family Formation and Structure"; cosponsored by AAAS Section K; 29 Dec.; arranged by Irene B. Taeuber, Princeton University, who will preside. Papers on plans for improving statistics of family formation and dissolution in the United States (Hugh Carter, National Office of Vital Statistics); social change and family structure: trends and prospects (Paul C. Glick, David M. Heer, and John C. Beresford, Bureau of the Census); discussant, Evelyn M. Kitagawa (University of Chicago); the tempo of reproduction in the family and in the population in Sweden (Norman B. Ryder, University of Wisconsin); discussant: Robert F. Winch (Northwestern University).

*American Statistical Association.* Symposium: "Descriptive Statistics"; cosponsored by Section K; 29 Dec.; arranged by Robert F. Winch, Northwestern University, who will preside. Papers on China's population statistics: the Ch'ing dynasty (Irene B. Taeuber); marital instability and its relation to education, income, and occupation: an analysis based on census data (Karen G. Hillman, Northwestern University); discussant, Robert M. Marsh, University of Michigan; seventy years of Illinois voting: 1888-1958 (Duncan MacRae, Jr., University of Chicago, and James A. Meldrum, Northern Illinois Univer-

sity); discussant, James A. Robinson (Northwestern University); estimation and use of production functions in agriculture (Earl O. Heady, State University of Iowa); discussant, Lester S. Kellogg (John Deere and Company).

Symposium: "Statistical Techniques"; cosponsored by AAAS Section K; 30 Dec.; arranged by Robert F. Winch, who will preside. Papers will be presented on "beyond factor analysis" (R. Darrell Bock, University of North Carolina); the use of forced choice questions and the power function (Robert McGinnis, University of Wisconsin); a re-examination of the repeated measurements problem (John W. Cotton, Northwestern University); a comprehensive model for reliability theory (Lee J. Cronbach, Nageswari Rajaratnam, and Goldine C. Gleser, University of Illinois); discussant, C. J. Burke (Indiana University).

*Metric Association.* Round-table discussion: "The Pharmacists' Method of Converting to Metrics"; 27 Dec.; discussion led by Harry E. Sagen, Abbott Laboratories. Papers on returns from the questionnaire of the British Metric Committee and the recent interest in metrics abroad (J. T. Johnson, Metric Association); the Metric Association's new membership campaign (Fred J. Helgren, Metric Association); why metric? an employee education program (L. A. Feiertag, Abbott Laboratories).

*National Academy of Economics and Political Science.* Invited papers: "The Underdeveloped Areas: Basic Problems of Growth and Development"; 30 Dec.; arranged by Amos E. Taylor, National Academy of Economics and Political Science, who will preside. Papers on sociological and demographic aspects of economic development (Philip M. Hauser, University of Chicago); some aspects of the economics of urbanization (Sidney C. Sufrin, Syracuse University).

#### History and Philosophy of Science

*Section L.* Two-session symposium: "Theory Construction in Logical and Historical Perspectives"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 27 and 28 Dec.; arranged by Herbert Feigl, University of Minnesota.

Part I; Herbert Feigl, presiding. Papers will be presented on the logic of discovery (Norwood Russell Hanson, Indiana University); discussant, Paul K. Feyerabend (University of Minnesota and University of California, Berkeley); the origins of relativity theory (Gerald Holton, Harvard University); discussant, Adolf Grunbaum (Lehigh University).

Part II; Adolf Grunbaum, presiding. Papers on the language of theories (Wilfrid Sellars, Yale University); discussant,

Norwood Russell Hanson (Indiana University); the key property of physical laws: inaccuracy (Michael Scriven, Swarthmore College); discussant, Henry Mehlberg (University of Chicago); time's arrow and physical laws (Henry Mehlberg); discussant, Adolf Grunbaum.

Vice-presidential address: "Philosophical Tangents of Science," by Herbert Feigl; 28 Dec.; John W. Streeter, Franklin Institute, presiding.

Symposium: "Empirical and Conventional Elements in Physical Theory"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 29 Dec.; arranged by Herbert Feigl; Wilfrid Sellars, presiding. Papers on law and convention in physical theory (Adolf Grunbaum); discussant, Paul K. Feyerabend; meaning postulates in scientific theories (Grover Maxwell, University of Minnesota); discussant, Wilfrid Sellars; the empirical foundations of geometry (Ernest W. Adams, University of California, Berkeley); discussant, Norwood Russell Hanson.

Symposium: "Induction, Probability, and Simplicity"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 29 Dec.; arranged by Herbert Feigl; with Grover Maxwell, presiding. Papers on the probability of nonrecurring events (Nicholas Rescher, Lehigh University); discussant, William Rozeboom (St. Olaf College); induction, probability, and simplicity (Wesley Salmon, Brown University); discussant, Stephen Barker (University of Virginia); the role of simplicity in explanation (Stephen Barker); discussant, Wesley Salmon.

Symposium: "The Logic of Variables and Constants"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 29 Dec.; arranged by Herbert Feigl, who will preside. Papers on constant and nonconstant fluents (Karl Menger, Illinois Institute of Technology); discussant, Ernest W. Adams; problems of fundamental constants in physics (Wolfgang Yourgrau, Carleton College); discussant, Alfred Lande (Ohio State University).

Symposium: "Philosophical Issues of Quantum Theory"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 30 Dec.; arranged by Herbert Feigl; Henry Mehlberg, presiding. Papers on "from duality to unity in quantum mechanics" (Alfred Lande); discussant, Henry Mehlberg; some reflections on the interpretation of elementary quantum theory (Paul K. Feyerabend); discussant, Norwood Russell Hanson; are wave mechanics and matrix mechanics equivalent theories? (Norwood Russell

Hanson); discussant, Edward L. Hill, (University of Minnesota); quantum physics and relativity theory (Edward L. Hill); discussant, Paul K. Feyerabend.

Symposium: "Methodological Problems of Psychology and the Social Sciences"; cosponsored by the American Philosophical Association and the Philosophy of Science Association; 30 Dec.; arranged by Herbert Feigl; Wilfrid Sellars, presiding. Papers on methodological issues of the social sciences (Paul F. Lazarsfeld, Columbia University); discussant, Roger Buck (Oberlin College); the role of intervening variables in psychological theory (Herbert Hochberg, Northwestern University);

discussant, Grover Maxwell; verbal utterances as data (Alex Buchwald, Indiana University); discussant, Roger Buck; formal analysis and the language of behavior theory (William Rozeboom); discussant, Alex Buchwald.

*Philosophy of Science Association.* Symposium: "The Theory of the Public Interest"; 28 Dec.; arranged by Wayne A. R. Leys, Roosevelt College. The discussants will be Lewis K. Zerby, Michigan State University, and Wayne A. R. Leys.

*Society for General Systems Research.* Business meeting and symposium: "The Synthesis of Organization"; 29 Dec.; arranged by Richard L. Meier,

University of Michigan, with Anatol Rapoport, University of Michigan, presiding. Papers will be presented on self-organizing phenomena and the first life (Sidney W. Fox, Florida State University); the theory of plans and human behavior (Eugene Galanter, University of Pennsylvania); self-organizing systems (Heinz Von Foerster, University of Illinois).

There will be a session for contributed papers; 30 Dec.; Charles A. McClelland, San Francisco State College, chairman.

*Society for the History of Technology.* There will be two sessions of invited papers, cosponsored by AAAS Section L; 29 Dec.; arranged by Robert P. Multhauf, Smithsonian Institution. Session I; Carl W. Condit, Northwestern University, presiding. Papers on the social consequences of occupational specialization (Raymond Mack, Northwestern University); individualism and technological change (Homer Barnett, Oregon State College); commentator, Otis D. Duncan (University of Chicago). Session II; Robert Carlson, University of Pittsburgh, presiding. Papers on the Niagara power project (Harold Sharlin, Brooklyn Polytechnic Institute); medieval technology as reflected in the *Treatise on Divers Arts* of Theophrastus (Cyril Stanley Smith, University of Chicago); the legend of Eli Whitney and interchangeable parts (Robert S. Woodbury, Massachusetts Institute of Technology).

## Forthcoming Events

### December

16-18. American Soc. of Agricultural Engineers, Chicago, Ill. (J. L. Butt, P.O. Box 229, St. Joseph, Mich.)

25-27. Indian Mathematical Soc., 25th conf., Allahabad, India. (B. N. Prasad, Allahabad Univ., Lakshmi Niwas, George Town, Allahabad 2.)

26-30. American Assoc. for the Advancement of Science, annual, Chicago, Ill. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., NW, Washington 5.)

27-30. American Anthropological Assoc., Mexico City. (W. S. Godfrey, Jr., Logan Museum, Beloit College, Beloit, Wisc.)

27-30. American Astronomical Soc., Cleveland, Ohio. (J. A. Hynek, Smithsonian Astrophysical Observatory, 60 Garden St., Cambridge 38, Mass.)

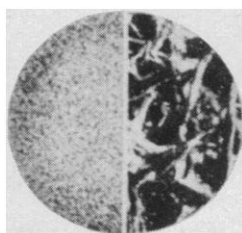
27-30. American Folklore Soc., Mexico City. (MacE. Leach, 110 Bennett Hall, Univ. of Pennsylvania, Philadelphia 4.)

27-30. American Statistical Assoc., Washington, D.C. (D. C. Riley, 1757 K St., NW, Washington 6.)

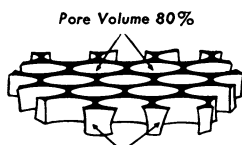
27-30. Institute of Mathematical Statistics (weather control), Washington, D.C. (J. Neyman, Statistical Lab., Univ. of California, Berkeley 4.)

28-29. American Chemical Soc. (Div. of Industrial and Engineering Chemistry),

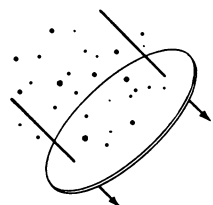
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|-----------|---------------------|---------------------|---------------------|-------|
| VF        | 10 $m\mu$           | $\pm 2 m\mu$        | 1.1                 | 100   |
| VM        | 50 $m\mu$           | $\pm 3 m\mu$        | 2.7                 | 200   |
| VC        | 100 $m\mu$          | $\pm 8 m\mu$        | 3.6                 | 600   |
| PH        | 0.30 $\mu$          | $\pm .02 \mu$       | 40                  | 4200  |
| HA        | 0.45 $\mu$          | $\pm .02 \mu$       | 80                  | 9600  |
| DA        | 0.65 $\mu$          | $\pm .03 \mu$       | 175                 | 28000 |
| AA        | 0.80 $\mu$          | $\pm .05 \mu$       | 220                 | 33000 |
| RA        | 1.2 $\mu$           | $\pm .3 \mu$        | 300                 | 38000 |
| SS        | 3.0 $\mu$           | $\pm .9 \mu$        | 400                 | 45000 |
| SM        | 5.0 $\mu$           | $\pm 1.2 \mu$       | 560                 | 70000 |

\*Mean Flow rates in cc/min/cm<sup>2</sup> filter area  
@ 25°C and 70 cm Hg  $\Delta p$

IN CANADA: The British Drug Houses (Canada) Ltd., Toronto 14, Ontario

symp., Baltimore, Md. (M. A. H. Emery, ACS, 18 and K Sts., NW, Washington D.C.)

28-29. Industrial Relations Research Assoc., Washington, D.C. (E. Young, Sterling Hall, Univ. of Wisconsin, Madison.

28-29 Mechanism of Interfacial Reaction, American Chemical Soc., annual symp, Baltimore, Md. (H. E. Hoelscher, Chemical Engineering Dept., Johns Hopkins Univ., Baltimore, Md.)

28-29. Lepidopterists' Soc., 10th annual, Ann Arbor, Mich. (E. G. Voss or W. H. Wagner, Dept. of Botany, Univ. of Michigan, Ann Arbor.)

28-29. Northwest Scientific Assoc., Spokane, Wash. (W. B. Merriam, Dept. of Geography, State College of Washington, Pullman.)

28-30. American Economic Assoc., Washington, D.C. (J. W. Bell, Northwestern Univ., 629 Noyes St., Evanston, Ill.)

28-30. American Philosophical Assoc. (eastern div.), New York, N.Y. (L. Garvin, Dept. of Philosophy, Univ of Maryland, College Park.)

28-30. American Physical Soc., Pasadena, Calif. (K. Darrow, APS, Columbia Univ., 116 St. and Broadway, New York, N.Y.)

28-30. Econometric Soc., Washington, D.C. (R. Ruggles, Dept. of Economics, Yale Univ., New Haven, Conn.)

28-30. Western Soc. of Naturalists, Los Angeles, Calif. (Y. U. Amrein, Dept. of Zoology, Pomona College, Claremont, Calif.)

28-31. Phi Delta Kappa, Columbia, Mo. (A. G. Clark, 316 Dalzell Ave., Ben Avon, Pittsburgh 2, Pa.)

28-16. Bahamas Surgical Conf., Nassau. (B. L. Frank, P.O. Box 4037, Fort Lauderdale, Fla.)

#### January

1-5. Electrochemical Soc., Chicago, Ill. (Electrochemical Soc., Inc., 216 W. 102 St., New York 25.)

1-5. Institute of Geographers, annual conf., Southampton, England. (A. E. Smailes, Queen Mary College, Univ. of London, Mile End Rd., London, E.1.)

3-9. Indian Science Cong. Assoc., 4th, Bombay. (B. W. Prasad, ISCA, Lakshmi Niwas, Georgetown, Allahabad 2, India.)

5-7. Recent Mechanical Engineering Developments in Automatic Control, symp., London, England. (Institution of Mechanical Engineers, 1 Birdcage Walk, London, S.W.1.)

6-8. Northeastern Weed Control Conf., 14th annual, New York, N.Y. (M. G. Wiltse, Chairman, Public Relations Committee, Dow Chemical Co., 916 Shoreham Bldg., 15 and H Sts., NW, Washington 5.)

7-10. Radioactive Isotopes, 4th intern. symp., Bad Gastein, Austria. (R. Hofer, Isotopen-Laboratorium, II. Medizinische Universitäts Klinik, 13, Garnisonsgasse, Vienna 9, Austria.)

8-11. Sanitary Engineering Conf., ASCE, Cincinnati, Ohio. (E. S. Kirkpatrick, ASCE, 33 W. 39 St., New York 18.)

11-13. American Acad. of Allergy, Hollywood-by-the-Sea, Fla. (J. O. Kelley, 756 N. Milwaukee St., Milwaukee 2, Wisc.)

(See issue of 13 November for comprehensive list)

## New Products

*The information reported here is obtained from manufacturers and from other sources considered to be reliable. Neither Science nor the writer assumes responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to the manufacturer. Include the department number in your inquiry.*

■ **SLIDE RULE**, for teaching, is 8 feet long and is mounted on trundles that permit complete 360-deg turning without lifting. Scale arrangement and slide movement are the same as those of the manufacturer's standard 10-in. Log Log Duplex Decitrig slide rule. (Keuffel & Esser, Dept. Sci210, Adams and Third Sts., Hoboken, N.J.)

■ **LABORATORY HYDRAULIC PRESS** of 50-ton capacity has electrically heated platens measuring 12 by 15 in. Temperature of either platen can be read independently, measured by thermocouples and pyrometer. Controls are located at eye level. (Wabash Metal Products Co., Dept. Sci223, 1576 Morris St., Wabash, Ind.)

■ **PULSE GENERATOR** produces current pulses with output rise time variable to 35  $\mu$ sec and peak amplitudes 50 ma to 2.5 amp. Variable width, amplitude, and rise times are produced from external triggers at rates to 3 Mcy/sec. The device may also be operated as an amplifier with output widths controlled by input signal durations. (Electro-Pulse Inc., Dept. Sci224, 11861 Teale St., Culver City, Calif.)

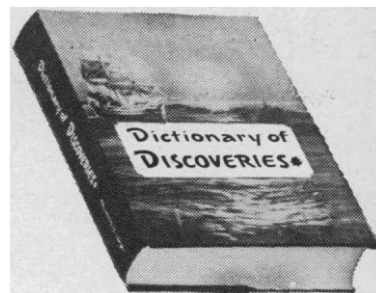
■ **CONTROLLED-TEMPERATURE BATH** for 12 standard cells maintains 35°C within  $\pm 0.01^\circ$  corresponding to cell-output variation of 0.5  $\mu$ v. Connection of positive sides of cells to individual binding posts permits each cell to be checked by changing one external connection. All wire and binding posts are made of copper to avoid thermal voltages. Approximately 4 gal of oil are required. (Daystrom, Inc., Dept. Sci226, 614 Frelinghuysen Ave., Newark 12, N.J.)

■ **HIGH-VOLTAGE PROBE** for oscilloscope is rated at 12 kv d-c or r.m.s., 25 kv peak. Attenuation ratio is 1000/1. Rise time is 12  $\mu$ sec and frequency response is d-c to 30 Mcy/sec. Input impedance is 2.5 pf paralleled by 100 megohm. A compensating network permits adjustment to oscilloscope input capacitances from 20 to 47 pf. (Tektronix, Inc., Dept. Sci227, P.O. Box 831, Portland 7, Ore.)

■ **MICROWAVE STABILITY TESTER** measures long-term drift and short-term deviation from 1100 to 10,000 Mcy/sec. Short-term accuracy is said to be 1/10<sup>9</sup> and long-term accuracy 1/10<sup>6</sup>. Short-

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by I. A. Langnas



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