

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

American College of Physicians Meeting, Cambridge, Massachusetts
March 4-8, 1963

F. T. Hambrecht, Physical Methodology in Medical Research (invited)

Physics Department Colloquium, Columbia University, New York
March 15, 1963

A. H. Barrett, Results of Mariner II Microwave Experiment (invited)

Medical College of Virginia, Richmond, Virginia
March 18, 1963

P. A. Willis, Experimental and Analytical Dissection and Modeling of a Neurological Control System (invited)

Bionics Symposium 1963, Dayton, Ohio
March 19-21, 1963

B. G. Farley, Aspects of the Behavior of a Neuron Network Model (invited)

M. C. Goodall, Realizability of Inductive Logic

K. Kornacher, How the Location of a Stimulus Is Correctly Signalled to the Central Nervous System

Symposium on Spectroscopy and Space Applications, California Institute of Technology, Pasadena, California
March 20-22, 1963

A. H. Barrett, Results of Mariner II Microwave Experiment (invited)

Conference on College Composition and Communication, Los Angeles, California
March 23, 1963

J. Viertel, Generative Grammars (invited)

Bell Telephone Laboratories, Inc., Murray Hill, New Jersey
March 24, 1963

G. L. Gerstein, Mathematical Models for Single Neuron Activity (invited)

MEETING PAPERS PRESENTED (continued)

Astronomy Department-Space Sciences Laboratory, University of California, Berkeley, California

March 25, 1963

A. H. Barrett, Results of Mariner II Microwave Experiment (invited)

First Annual Symposium on Biomathematics and Computer Science in the Life Sciences, Houston, Texas

March 29, 1963

W. A. Rosenblith, Some New Technologies and Their Promise for the Life Sciences (invited)

Northeastern New York Section Meeting, American Nuclear Society, New York

April 2, 1963

D. J. Rose, Controlled Fusion Research at M.I.T. (invited)

Computation Laboratory, Harvard University, Cambridge, Massachusetts

April 3, 1963

W. A. Rosenblith, Computers in Biology and Medicine (invited)

Symposium on "Feedback Systems Controlling Nervous Activity," Villahermosa, Tobasco, Mexico

April 8-10, 1963

J. S. Barlow, Some Statistical Characteristics of Electrocortical Activity in Relation to Visual-Oculomotor Tracking in Man (invited)

L. Stark, Principles of Neurological Feedback Control Systems (invited)

AIEE Automatic Control Symposium, Tufts University, Medford, Massachusetts

April 9, 1963

P. A. Willis, Neuromuscular Control System of the Human Operator (invited)

Fourth Annual Symposium on Engineering Aspects of Magnetohydrodynamics, University of California, Berkeley, California

April 10-11, 1963

R. J. Briggs and A. Bers, Electron-Beam Interactions with Ions in a Warm Plasma

Biennial Meeting, Society for Research in Child Development, University of California, Berkeley, California

April 11-13, 1963

Paula Menyuk, Alternation of Rules in Children's Grammar

MEETING PAPERS PRESENTED (continued)

Thirty-fourth Annual Meeting, Eastern Psychological Association, New York
April 11-13, 1963

R. D. Hall, Some Characteristics of Cortical Evoked Potentials to Photic Stimuli
in the Behaving Rat

47th Annual Meeting, Federation of American Societies for Experimental Biology,
Atlantic City, New Jersey

April 16-20, 1963

A. Cavaggioni and M. Goldstein, Enhancement of Shock-Evoked Responses from
Striate Cortex Following either Onset or Termination of Light (Abstract to be
published in Federation Proceedings) (invited)

P. G. Katona and G. O. Barnett, An Analysis of Heart-Rate Control

American Geophysical Union, Washington, D. C.

April 17, 1963

A. H. Barrett, Results of Mariner II Microwave Experiment (invited)

113th Meeting, American Astronomical Society, Tucson, Arizona

April 17-20, 1963

D. H. Staelin, A. H. Barrett, and B. R. Kusse, Measurements of the Sun, Moon,
Venus, and Taurus A at 1.25-cm Wavelength

Graduate Seminar, Electrical Engineering Department, University of Rochester,
Rochester, New York

April 19, 1963

P. A. Willis, Modeling the Neuromuscular Control System of the Human Operator
(invited)

Symposium on Biophysics, American Physical Society, New York State Section,
Schenectady, New York

April 19, 1963

W. A. Rosenblith, Signal Processing in Biological Systems (invited)

American Physical Society Meeting, Washington, D. C.

April 22-25, 1963

G. Fiocco and E. Thompson, Techniques for Observing Thomson Scattering of
Optical Radiation from Electrons

C. W. Garland and J. S. Jones, Elastic Constants of Ammonium Chloride near
the Lambda Point

E. Thompson and G. Fiocco, Thomson Scattering of Optical Radiation from a
Thermal Plasma

MEETING PAPERS PRESENTED (continued)

Seminar on Biophysics for Science Writers, American Institute of Physics,
Washington, D.C.

April 26, 1963

W. A. Rosenblith, Biophysics of Communications Processes (invited)

Fourth National Symposium on Human Factors in Electronics, Men, Machines and
Systems, Washington, D.C.

May 2, 1963

L. Stark and E. Van Horn, A Computer Controlled Experiment in Human Prediction

Johnson Foundation Biophysical Seminar, University of Pennsylvania, Philadelphia,
Pennsylvania

May 8, 1963

L. Stark, Dynamical Approach to Biological Systems (invited)

Drexel Institute, Philadelphia, Pennsylvania

May 9, 1963

L. Stark, Servoanalysis of Neurological Reflexes (invited)

National Academy of Sciences, Armed Forces-NRC Committee on Vision,
Washington, D.C.

May 9, 1963

L. Stark, Specialized Transducers and On-line Digital Computers for Setting
Control Systems in the Eye (invited)

Sixty-fifth Meeting, Acoustical Society of America, New York

May 15-18, 1963

D. M. Green, Consistency of Auditory Detection Judgments

A. S. House and A. P. Paul, Automatic Reduction of Vowel Spectra: A Quantita-
tive Analysis of Error Scores

U. Ingard, Noise Generation of Fluid Flow in Ducts

Sixty-fifth Meeting, Acoustical Society of America, Symposium on Articulation in
Speech Analysis and Synthesis, New York

May 15-18, 1963

J. M. Heinz, Analysis of Speech Signals into Articulatory Parameters (invited)

MEETING PAPERS PRESENTED (continued)

Sixty-fifth Meeting, Acoustical Society of America, Symposium on Unit Activity in the Auditory Nerve, New York

May 15-18, 1963

N. Y-S. Kiang, Spontaneous Activity of Single Auditory Nerve Fibers in Cats (invited)

J. R. Welch, Psychoacoustical Study of Some Factors Affecting Human Echo Location (invited)

The Biological Bases of Memory, University of California, San Francisco Medical Center, San Francisco, California

May 21, 1963

W. A. Rosenblith, Sensory Information Processing, Neuro-electric Activity and Memory (invited)

1963 Spring Joint Computer Conference, American Federation of Information Processing Societies, Detroit, Michigan

May 22, 1963

W. A. Rosenblith, Computers and Brains: Competition and/or Co-existence (invited)

Lectures, Argonne National Laboratories, Lamont, Illinois

May 24, 1963

G. A. Brown, The Condensing Ejector Liquid-Metal MHD Power-Generation System (invited)

W. D. Jackson, Liquid-Metal MHD Generators for Space Power System (invited)

Conference on Computers in Medicine and Biology, New York Academy of Sciences – Section of Biology and Medicine and Division of Instruments, New York

May 27-29, 1963

W. E. Clark and C. E. Molnar, The LINC (invited)

L. Stark, P. A. Willis, A. A. Sandberg, S. Stanten, and J. Dickson, On-line Digital Computers Used in Biological Experiments and Modeling

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.)

A. H. Barrett and E. Lilley, Mariner-2 Microwave Observations of Venus (Sky and Telescope)

G. Fiocco, Applicazioni dei Maser ottici alle ricerche spaziali (Missili)

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION (continued)

- G. L. Gerstein and B. Mandelbrot, Random-Walk Models for the Spike Activity of a Single Neuron (Biophys. J.)
- R. J. Hull and H. H. Stroke, 3S_1 Hyperfine-Structure Separations and Isotope Shifts of Radioactive Cd¹⁰⁷, Cd¹⁰⁹, and of Stable Cd Isotopes (J. Opt. Soc. Am.)
- U. Ingard and G. C. Maling, Jr., The Effect of Atmospheric Turbulence on Sound Propagated over Ground (J. Acoust. Soc. Am.)
- G. C. Maling, Jr., Simplified Analysis of the Rijke Phenomenon (J. Acoust. Soc. Am.)
- D. H. Staelin, A. H. Barrett, and B. R. Kusse, Measurement of the Sun, Moon, Venus, and Taurus A at 1.25-cm Wavelength (Astron. J.) (Abstract)
- C. V. Stager, Hyperfine Structure of Hg¹⁹⁷ and Hg¹⁹⁹ (Phys. Rev.)
- K. N. Stevens and A. S. House, Perturbation of Vowel Articulations by Consonantal Context: An Acoustical Study (J. Speech Hearing Res.)
- J. A. Swets, Central Factors in Auditory Frequency Selectivity (Psychol. Bull.)
- J. A. Swets and Susan T. Sewall, Invariance of Signal Detectability over Stages of Practice and Levels of Motivation (J. Exptl. Psychol.)
- R. Weiss, Stark Effect and Hyperfine Structure of Hydrogen Fluoride (Phys. Rev.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- G. W. Stroke, Attainment of High Efficiencies in Blazed Optical Gratings by Avoiding Polarization in the Diffracted Light (Physics Letters (Amsterdam))

TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.)

- 411 Chung Laung Liu, Some Memory Aspects of Finite Automata
- 412 Sander Weinreb, A Digital Spectral Analysis Technique and Its Application to Radio Astronomy

SPECIAL PUBLICATIONS

- S. C. Brown and G. Bekefi, Radiofrequency Emission from Plasmas not in Thermodynamic Equilibrium (Nuclear Fusion: 1962 Supplement, Part 3)
- W. A. Clark and C. E. Molnar, The LINC (Proc. New York Academy of Sciences Conference on Computers in Medicine and Biology)

SPECIAL PUBLICATIONS (continued)

- R. C. Gesteland, J. Y. Lettvin, W. H. Pitts, and A. Rojas, Odor Specificities of the Frog's Olfactory Receptors (Proc. First International Symposium on Olfaction and Taste. Pergamon Press, New York, 1963, pp. 19-34)
- G. G. Hammes and P. Fassella, The Mechanism of Enzymatic Transamination (a chapter in Pyridoxal Catalysis. Pergamon Press, New York)
- H. Putnam, An Examination of Grünbaum's Philosophy of Geometry (Philosophy of Science, Vol. II. Interscience Publishers, New York, 1963)

