PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Mental Health Training Seminar, Brain Research Institute, University of California, Los Angeles, California

January 12-13, 1966

J. S. Barlow, Some Electrophysiological and Behavioral Correlates of Perception (invited)

Biological Systems Analysis Seminar, California Institute of Technology, Pasadena, California

January 17, 1966

J. S. Barlow, Electrophysiological and Behavioral Aspects of Perception of Visual Stimuli in Man (invited)

Lecture, Barrow Neurological Institute, Phoenix, Arizona

February 21, 1966

J. S. Barlow, Electrophysiological and Behavioral Correlates of Perception (invited)

Second Conference on Information and Control Processes in Living Systems (sponsored by the New York Academy of Sciences), Civic Palisades, California

February 27-March 2, 1966

R. Alter, Special Aspects of Prosthetic Devices (invited)

Journées Informatique, Toulouse, France

March 7-10, 1966

M. Eden, Medical Diagnosis as a Problem in Pattern Recognition (invited)

Brain Research Institute Seminar, University of California Medical Center, Los Angeles, California

March 8, 1966

J. S. Barlow, The Vestibular System in Relation to Animal Navigation (invited)

Physics Colloquium, New York University, New York

March 14, 1966

J. G. King, Atomic Beams below the Lambda Point (invited)

Lecture, Los Angeles Society of Neurology and Psychiatry, Los Angeles, California March 16, 1966

J. S. Barlow, Studies of Neurological Diseases with the Aid of Computer Techniques (invited)

IEEE International Convention, New York

March 21-25, 1966

- H. A. Haus, Model for Force Density in Moving Magnetized Material
- D. E. Nelsen, Statistics of Switching-Time Jitter for a Tunnel Diode Threshold-Crossing Detector
- P. Penfield, Jr., Thermodynamics and Force of Electromagnetic Origin

MEETING PAPERS PRESENTED (continued)

Conference on Symbolic and Algebraic Manipulations, Washington, D.C. March 27-29, 1966

J. Moses, Solution of Systems of Polynomial Equations by Elimination

Department of Zoology Seminar, University of Iowa, Iowa City, Iowa April 5, 1966

J. S. Barlow, The Neurophysiological Basis of Animal Navigation (invited)

Department of Neurology and Medical Statistics Seminar, Mayo Clinic, Rochester, Minnesota

April 6, 1966

J. S. Barlow, The Comparative Geography of Multiple Sclerosis, Rheumatic Fever, and Rheumatoid Arthritis (invited)

International Quantum Electronics Conference, Phoenix, Arizona

April 12-15, 1966

C. Freed and H. A. Haus, Photoelectron Statistics Produced by a Laser Operating below and above the Threshold of Oscillation

Department of Pathobiology Seminar, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland

April 13, 1966

J. S. Barlow, Animal Navigation and Inertial Navigation (invited)

Federation Proceedings of Experimental Biology, Atlantic City, New Jersey April 13, 1966

A. W. B. Cunningham and P. H. O'Lague, Microelectrode Studies of 14-day Chick Embryo Telencephalon in vitro

Special Lecture Series in Physiology, The Johns Hopkins University School of Medicine, Baltimore, Maryland

April 13, 1966

J. S. Barlow, The Electroencephalogram as a Communications Signal in the Study of Brain Mechanisms (invited)

Eastern Psychological Association Thirty-seventh Annual Meeting, New York City April 14-16, 1966

- R. D. Hall and R. G. Mark, Auditory Evoked Potentials in the Rat During Conditioning
- P. A. Kolers, Reading Linguistically Mixed Materials

International Symposium on Generalized Networks, Polytechnic Institute of Brooklyn, New York

April 14-16, 1966

- P. Penfield, Jr., Thermodynamics of Frequency Conversion
- V. Prabhu, Invariants of Multifrequency Noisy Networks

MEETING PAPERS PRESENTED (continued)

Council for Exceptional Children, Annual International Convention, Toronto, Canada April 17-24, 1966

Paula Menyuk, Generative Grammar and Studying the Language of the Exceptional Child

Annual Spring Meeting of the International Scientific Radio Union, Commission 5, Washington, D. C.

April 18-20, 1966

R. J. Allen and A. H. Barrett, Variations in the Centimeter Radio Emission from 3C273

Forty-seventh Annual Meeting, American Geophysical Union, Washington, D.C. April 19-22, 1966

G. Grams and G. Fiocco, Studies of Stratospheric Aerosols and Correlations with Ozone

Sherwood Theoretical Meeting, San Diego, California

April 21-22, 1966

- A. Bers and F. C. Hoh, Mechanism of Energy Transfer from Resonant Particles to Magnetic Field Perturbations
- T. H. Dupree, Particle-Wave Interaction in Turbulent Plasma

Wistar Institute Conference on Neo-Darwinian Evolution, Philadelphia, Pennsylvania April 25, 1966

M. Eden, Inadequacies of Neo-Darwinian Evolution as a Scientific Theory (invited)

American Physical Society Meeting, Washington, D.C.

April 25-28, 1966

- K. W. Billman, C. G. Chull, and F. A. Wedgwood, Neutrality of the Atom
- W. D. Johnston, Jr. and J. G. King, Velocity Distributions of Helium Beams from Liquid Helium II
- S. G. Kukolich and J. G. King, Ammonia Hyperfine Structure
- C. O. Thornburg, Jr. and J. G. King, Search for an Electric Dipole Moment in the Cesium Atom

Laboratorio Gas Ionizzati Seminars, Frascati, Italy

April 27, 1966

S. C. Brown, Far Infrared Plasma Diagnostics (invited)

Use of Computers for Bibliographic Search (invited)

A. E. C. Conference, University of Miami, Coral Gables, Florida

May 2-5, 1966

J. C. Ingraham, Anomalous Plasma Loss Processes

Bionics Symposium, Dayton, Ohio

May 2-5, 1966

J. Y. Lettvin and R. C. Gesteland, A Code in the Nose

MEETING PAPERS PRESENTED (continued)

NASA Electronics Research Center Seminar, Cambridge, Massachusetts May 4, 1966

C. H. Perry, Applications of Interferometric Spectroscopy in the Infrared (invited)

Sperry-Rand Research Center Colloquium, Sudbury, Massachusetts May 9, 1966

U. Ingard, Acoustic Wave Generation and Amplification in a Plasma (invited)

National Telemetering Conference, Boston, Massachusetts May 10-12, 1966

T. S. Huang and O. J. Tretiak, An Efficient Facsimile Transmission System

JOURNAL PAPERS ACCEPTED FOR PUBLICATION

(Reprints, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.)

- J. S. Barlow, Correlation Analysis of EEG-Tremor Relationships in Man (EEG Clin., Neurophysiol. Supplement)
- J. S. Barlow, A Simple Time-Division Multiflexing System for Low-Frequency Bioelectric Signals (IEEE Trans. (BME))
- T. Brown and D. J. Rose, Plasma Diagnostics Using Lasers: Relations between Scattered Spectrum and Electron Velocity Distribution (J. Appl. Phys.)
- A. W. B. Cunningham, P. O'Lague, R. Rojas-Corona, and J. A. Freeman, Micro-electrode Studies of Spontaneous Potentials from Chick Embryo Telencephalon in vitro (Experientia)
- E. T. Gerry and D. J. Rose, Plasma Diagnostics by Thomson Scattering of a Laser Beam (J. Appl. Phys.)
- E. T. Gerry and D. J. Rose, Combined Anode-Cathode Feed of a Hollow-Cathode Arc (J. Appl. Phys.)
- P. A. Kolers and M. T. Katzman, Naming Sequentially Presented Letters and Words (Language and Speech)
- W. Lea, The 'Spectrum' of Weak Generative Power of Grammars (MT)
- J. H. Loehlin, P. G. Mennitt, and J. S. Waugh, Proton Resonance Study of Molecular Motion and Phase Behavior of Solid H₂S and H₂Se (J. Chem. Phys.)

o (s

- J. Moses, Solution of Systems of Polynomial Equations by Elimination (Communs. Assoc. Computing Machinery)
- J. D. Macomber and J. S. Waugh, Theory of the Nuclear Resonance Spectrum of a Polar Liquid in an Alternating Electric Field (J. Chem. Phys.)

JOURNAL PAPERS ACCEPTED FOR PUBLICATION (continued)

- L. R. Rabiner, C. L. Lawrence, and N. I. Durlach, Further Results on Binaural Unmasking and the EC Model (J. Acoust. Soc. Am.)
- K. N. Stevens, A. S. House and A. P. Paul, Acoustic Description of Syllabic Nuclei:
 An Interpretation in Terms of a Dynamic Model of Articulation (J. Acoust. Soc. Am.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- A. H. Barrett and A. E. E. Rogers, Observations of Circularly Polarized OH Emission and Narrow Spectral Features (Nature)
- J. M. Deutch and J. S. Waugh, Erratum: On the Detectability of the Quadratic NMR Electric-Field Effect in Liquids [J. Chem. Phys. <u>43</u>, 2568 (1965] (J. Chem. Phys.)
- J. H. Fertel, C. H. Perry, A. Sabatini, L. Sacconi and V. Schettino, Correction to "Long-Wave Infrared Spectra of Alkali Salts to Platinum Halide Complexes" by J. H. Fertel and C. H. Perry [J. Phys. Chem. Solids <u>26</u>, 1773 (1965)] (J. Phys. Chem. Solids)
- ... Haus, Higher Order Trapped Light Beam Solutions (Appl. Phys. Letters)
- 🔆 U. Ingard and W. M. Manheimer, Energy Density in a Plasma Oscillation (Phys. Fluids)
- J. J. Katz, Mr. Pfeifer on Questions of Reference (Foundations of Language)
- Fig. H. B. Lee, An Alternate Derivation of the Fujisawa Condition (IEEE Trans. (CT))
- V. Prabhu, Noise Performance of Abrupt-Junction Varactor Frequency Multipliers (Proc. IEEE)

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, Massachusetts 02139.)

- 443 John S. MacDonald, Experimental Studies of Handwriting Signals
- 444 Robert Bruce Parente, Functional Analysis of Systems Characterized by Nonlinear Differential Equations
- 448 Paul M. Ebert, Error Bounds for Parallel Communication Channels
- 450 C. W. Niessen, An Experimental Facility for Sequential Decoding
- 451 Peter R. Gray, Statistical Analysis of Electrophysiological Data from Auditory Nerve Fibers in Cat
- 452 Bernard Gold, Word-Recognition Computer Program

SPECIAL PUBLICATIONS

- J. C. Ingraham, Electron-Atom Collision Cross-Section Measurements in the Afterglow of a Pulsed Cesium Plasma (Proc. Seventh International Conference on Phenomena in Ionized Gases, edited by B. Perović and D. Tošić, Institute of Nuclear Sciences, Beograd, July 1966)
- J. C. Ingraham, Anomalous Plasma Loss Processes (Proc. A.E.C. Conference, University of Miami, Coral Gables, Florida, May 2-5, 1966)
- E. S. Klima, Negation in English, a chapter in Readings in the Philosophy of Language, edited by J. J. Katz and J. A. Fodor (Prentice-Hall, Inc., Englewood Cliffs, New Jersey)
- P. A. Kolers, Recall of Bilingually Presented Words (Abstract, Proc. Ninth Congress of the Inter-American Society of Psychology, Miami Beach, Florida, Dec. 17-22, 1964, p. 393)
- D. E. Nelsen, Statistics of Switching-Time Jitter for a Tunnel Diode Threshold-Cross- ing Detector (1966 IEEE International Convention Record)
- P. Penfield, Jr., Thermodynamics and Force of Electromagnetic Origin (1966 IEEE International Convention Record)