

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

International Symposium on Global Communication - Globecom Six, Philadelphia, Pennsylvania

June 2-4, 1964

I. M. Jacobs, Modulation and Coding for a Gaussian Channel (invited)

Symposium on Molecular Structure and Spectroscopy, Ohio State University, Columbus, Ohio

June 15-19, 1964

Jeanne H. Fertel and C. H. Perry, Long-Wave Infrared Lattice Vibrations of Some Alkali Earth Halide Complexes

C. H. Perry and D. J. McCarthy, Far Infrared Dispersion in Some Perovskite Titanates and Zirconates

Colloquium, Technical University, Berlin, Germany

June 18, 1964

W. A. Rosenblith, The Coding of Sensory Information in the Auditory Nervous System (invited)

American Society for Engineering Education Annual Meeting, University of Maine, Orono, Maine

June 22-26, 1964

R. E. Gallager, Coding Theory (invited)

International Biophysics Meeting, Paris

June 22-27, 1964

M. C. Goodall, Problem of Higher Functions in the Brain

W. M. Siebert, Some Implications of the Stochastic Behavior of Primary Auditory Neurons (invited)

T. F. Weiss, Remarks on Probabilistic Models of the Peripheral Auditory System (invited)

Conference on Precision Electromagnetic Measurements, National Bureau of Standards, Boulder, Colorado

June 23-25, 1964

R. S. Badessa, V. J. Bates, and C. L. Searle, Cesium Beam Standard Employing Square-Wave Phase Modulation

Electron Devices Research Conference, Cornell University, Ithaca, New York

June 24-26, 1964

C. Freed and H. A. Haus, Optical Maser Spectra Deduced from Photoelectron Counting

American Physical Society Meeting, Denver, Colorado

[Joint Symposium of the Division of Fluid Dynamics and the Division of Plasma Physics]

June 25-27, 1964

A. Bers, Nature of Stable and Unstable Waves in Plasmas and Other Dispersive Media (invited)

MEETING PAPERS PRESENTED (continued)

Institute Blaise Pascal, Paris

June 26, 1964

M. Eden, A Mathematical Formalism for Handwriting (invited)

International Symposium on Diffusion of Plasma across a Magnetic Field, Munich, Germany

June 29-July 3, 1964

D. R. Whitehouse, Multidimensional Plasma Diffusion in a Magnetic Field

International Symposium on Magnetohydrodynamic Electrical Power Generation, Paris

July 6-10, 1964

G. A. Brown and K. S. Lee, A Liquid Metal MHD Power Generation Cycle Using a Condensing Ejector

W. D. Jackson, E. S. Pierson, and R. P. Porter, Design Considerations for MHD Induction Generators

Conference on Mathematics and Computer Science in Biology and Medicine, Medical Research Council, Oxford, England

July 7, 1964

W. A. Rosenblith, Quantification of Electrical Activity in the Nervous System (invited)

Fourth International Symposium on Rarefied Gasdynamics, Toronto, Canada

July 14-17, 1964

R. E. Stickney, The Effect of Adsorbed Monolayers on Energy Accommodation

Annual Meeting, Association for Machine Translation and Computational Linguistics, Indiana University, Bloomington, Indiana

July 29-30, 1964

J. L. Darlington, The Level-of-Analysis Problem in Logic Translation

D. A. Dinneen, Translation via Specifiers

B. K. T'sou, Random Generation of Chinese Adjectival Modifiers

Linguistic Society of America Meeting, Indiana University, Bloomington, Indiana

July 30-31, 1964

P. Kiparsky, Stress in Modern German

B. E. F. Lindblom and S. E. G. Öhman, Towards a Phonetic Model of Spoken Language

American Crystallographic Association Meeting, Bozeman, Montana

July 26-31, 1964

B. E. Warren and J. S. Clarke, Interpretation of the Anomalous Surface Reflection of X-rays

International Conference of Logic, Methodology, and Philosophy of Science, Jerusalem, Israel

August 22-September 2, 1964

W. S. McCulloch, What's in the Brain That Ink May Character? (invited)

W. S. McCulloch, What New to Register? (invited)

MEETING PAPERS PRESENTED (continued)

International Symposium on Algebraic Linguistics and Automata Theory, Colloquium on Algebraic Linguistics, Jerusalem, Israel

August 24-25, 1964

N. Chomsky, Algebraic Linguistics (Survey paper)

G. H. Matthews, Analysis by Synthesis of Sentences in the Light of Recent Developments in the Theory of Grammar (invited)

Collegium Otorhinolaryngologicum Amicitiae Sacrum, Würzburg, Germany

August 31-September 4, 1964

N. Y-s. Kiang, Stimulus Coding in the Auditory Nerve and Cochlear Nucleus (invited)

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, Massachusetts, 02139.)

- A. H. Barrett, Detection of the OH and Other Molecular Lines in the Radio Spectrum of the Interstellar Medium (IEEE Trans. (Military Electronics))
- R. J. Briggs, Transformation of Small-Signal Energy and Momentum of Waves (J. Appl. Phys.)
- J. C. Burgiel, Antiferromagnetic Resonance Linewidth in MnF_2 near the Transition Temperature (J. Phys. Chem. Solids)
- J. C. Burgiel, Temperature Dependence of the Antiferromagnetic Anisotropy in MnF_2 (J. Phys. Chem. Solids)
- Renata E. Cathou and G. G. Hammes, Relaxation Spectra of Ribonuclease (Ber. Bunsenges. Physik. Chem.)
- N. I. Durlach, Note on Binaural Masking-Level Differences as a Function of the Interaural Correlation of the Masking Noise (J. Acoust. Soc. Am.)
- W. J. C. Grant and M. W. P. Strandberg, Magnetic Field of Noncylindrical Coils (Rev. Sci. Instr.)
- G. G. Hammes and S. A. Levison, A Kinetic Investigation of the Interaction of Adenosine-5'-Triphosphate with Divalent Metal Ions (Biochem.)
- T. S. Huang, The Power Density Spectrum of Television Random Noise (Appl. Opt.)
- N. Y-s. Kiang, Stimulus Coding in the Auditory Nerve and Cochlear Nucleus (Acta Oto-Lar.)
- H. B. Lee, A New Canonic Realization Procedure (IEEE Trans. (PTGCT))
- H. B. Lee, The Physical Meaning of Compactness (IEEE Trans. (PTGCT))

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION (continued)

- P. Penfield, Review of "Parametric and Tunnel Diodes" by Kern K. N. Chiang (Prentice-Hall, 1964) (Proc. IEEE)
- W. F. Pickard, J. Y. Lettvin, J. W. Moore, M. Takata, J. Pooler, and T. Bernstein, Cesium Ions Do Not Pass the Membrane of Giant Axon (Proc. Natl. Acad. Sci. U.S.)
- W. Simon, The Real-Time Sorting of Neuro-Electric Action Potentials in Multiple Unit Studies (EEG Clin. Neurophysiol.)
- M. Schetzen, Measurement of Correlation Functions (Proc. I. E. E. (London))
- A. Taub, Local, Segmental and Supraspinal Interaction with a Dorsolateral Spinal Cutaneous Afferent System (Exptl. Neurol.)
- W. J. Tomlinson III and H. H. Stroke, Nuclear Moments and Isotope and Isomer Shifts of Neutron-Deficient Mercury Isotopes 195, 195^m, 194, 193, 193^m, and 192 (Nuclear Phys.)
- H. L. Van Trees, The Performance of an Optimum Demodulator for Multilevel Phase-Modulated Signals (IEEE Trans. (PGCS))
- J. F. Waymouth, Perturbation of a Plasma by a Probe (Phys. Fluids)
- R. C. Wingerson, T. H. Dupree, and D. J. Rose, Trapping and Loss of Charged Particles in a Perturbed Magnetic Field (Phys. Fluids)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- A. H. Barrett and A. E. E. Rogers, Spectrum and Relative Intensities of Interstellar OH Lines (Nature)
- K. W. Gentle and U. Ingard, Determination of Neutral-Gas Temperature in a Plasma Column from Sound Velocity Measurements (Appl. Phys. Letters)
- K. W. Gentle, U. Ingard, and G. Bekefi, Effect of Gas Flow on the Properties of a Plasma Column (Nature)
- S. Greenblatt, Transistor Becomes Sensor in Temperature Regulation (Electronics, Design Casebook Section)
- T. S. Huang, Some Comments on Pseudorandom Scanning (IEEE Trans. (CT))
- S. G. Kukolich, Correction to "Ammonia Maser with Separated Oscillating Fields" (Proc. IEEE)
- P. Penfield, Jr., Electromagnetism of Moving Media (Proc. IEEE)
- M. B. Sachs, Characteristics of Primary Auditory Neurons in the Green Frog (J. Acoust. Soc. Am.)
- B. E. Warren and J. S. Clarke, Interpretation of the Anomalous Surface Reflection of X-Rays (J. Appl. Phys.)

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.)

- 424 Robert S. Cooper, Traveling Density Variations in Partially Ionized Gases
- 426 M. T. Vlaardingerbroek, Excitation of Ion Oscillations in Beam-Plasma Systems
- 427 Lucien J. Donadieu, Development of a Large-Volume Superconducting Solenoid

SPECIAL PUBLICATIONS

- J. D. Bruce, On the Optimum Quantization of Stationary Signals (IEEE International Convention Record, Part I, 1964, pp. 118-124)
- G. Bekefi, Thermal and Non-Thermal Emission from Plasmas (Proc. International Scientific Radio Union General Assembly, Tokyo, Japan, September 9-20, 1963. Elsevier Publishing Company, Amsterdam, 1964)
- W. S. McCulloch and W. L. Kilmer, Toward a Theory of the Reticular Formation (Proc. Fifth IEEE National Symposium on Human Factors in Electronics, San Diego, California, May 4-5, 1964)
- W. S. McCulloch and W. L. Kilmer, Introduction to the Problem of the Reticular Formation (Lecture, International Summer School of Physics, Ravello, Italy, June 23, 1964)
- A. V. Oppenheim, Superposition in a Class of Nonlinear Systems (IEEE International Convention Record, Part I, 1964, pp. 171-177)
- C. H. Perry, The Far Infrared Spectra and Dielectric Dispersion of a Variety of Materials Having the Perovskite and Related Structures (Proc. International Commission for Optics Conference on Photographic and Spectroscopic Optics, Tokyo and Kyoto, Japan, September 1-8, 1964)
- C. L. Searle and M. A. Yaffee, Velocity of Light in Terms of Hg^{198} and Cs^{133} (NEREM RECORD, Vol. VI)
- D. H. Staelin, Microwave Spectral Measurements Applicable to Oceanography (Conference to Study the Feasibility of Conducting Oceanographic Explorations from Aircraft, Manned Orbital and Lunar Laboratories, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, August 24-28, 1964) (invited)
- D. R. Whitehouse, Multidimensional Plasma Diffusion in a Magnetic Field (Proc. International Symposium on Diffusion of Plasma across a Magnetic Field, Munich, Germany, June 29-July 3, 1964)
- V. H. Yngve, Über Ergebnisse und Möglichkeiten der Maschinellen Sprachübersetzung (Beiträge zur Sprachkunde und Informationsverarbeitung)