

## PUBLICATIONS AND REPORTS

### MEETING PAPERS PRESENTED

Physical Chemistry Seminar, Massachusetts Institute of Technology, Cambridge, Massachusetts

September 30, 1969

J. G. King, The Steam-Powered Microscope (invited)

CIBA Foundation Symposium on Sensorineural Hearing Loss, London, England

December 2-4, 1969

N. Y. S. Kiang, E. C. Moxon, and R. A. Levine, Auditory-Nerve Activity in Cats with Normal and Abnormal Cochleas (invited)

American Astronomical Society Meeting, New York

December 8-10, 1969

J. M. Moran, A. H. Barrett, and W. J. Wilson, Long Baseline Interferometric Measurements of the OH Source NML Cygnus

R. M. Price, The Distribution of Nonthermal Radio Emission in the Galaxy

D. H. Staelin, Model for Pulsar Radio Emission

1969 International IEEE/GAP Symposium and Fall UNC/URSI Meeting, University of Texas at Austin, Texas

December 8-11, 1969

J. I. Glaser, Use of the Addition Theorem to Synthesize Concentric Circular-Cylindrical Waves by an Eccentric Feed

Avalanche Diode Workshop, New York

December 10-11, 1969

P. Penfield, Jr., Effects and Noise in Avalanche Diodes

OHD Technical Review Meeting, Washington, D.C.

December 11-12, 1969

D. H. Steinbrecher, J. P. Curtis, and R. E. Snyder, Intermodulation Distortion in Amplifiers and Broadband Mixers

Seminar, University of Massachusetts, Amherst, Massachusetts

December 18, 1969

U. Ingard, Aerodynamic Noise and Linear Acoustics (invited)

IEEE Arden House Workshop on Digital Filtering, Columbia University, New York

January 11-14, 1970

G. M. Robbins, The Digital Representation of a Class of Linear, Shift-Variant Systems

Third Hawaii International Conference on System Sciences, Honolulu, Hawaii

January 14-16, 1970

J. L. Ramsey, Realization of Optimum Interleavers

MEETING PAPERS PRESENTED (continued)

American Physical Society Meeting, Chicago, Illinois  
January 26-29, 1970

C. Krischer and U. Ingard, Effect of an Applied Drift Field on the Ultrasonic Dispersion in CdS

Physics Colloquium, Ohio State University, Columbus, Ohio  
February 4, 1970

J. G. King, Atomic Beams and Low Temperature Physics (invited)

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)

- G. A. Baraff, Fermi Liquid Effects on Surface Impedance in the Anomalous Skin-Effect Regime (Phys. Rev.)
- G. A. Baraff, Surface-Impedance Anomalies at Perpendicular-Field Cyclotron Resonance in the Anomalous-Skin-Effect Regime (Phys. Rev.)
- R. A. Blanken, Observation of Plasma Effects on the Synchrotron Emission from a Hot Electron Plasma (Phys. Fluids)
- A. A. Borbély, Changes in Click-Evoked Responses as a Function of Depth in Auditory Cortex of the Rat (Brain Res.)
- B. F. Burke, Review : Structures Technology for Large Radio and Radar Telescope Systems, James W. Mar (ed.) (The M.I.T. Press, Cambridge, Mass., 1969)
- D. Chase, Coding Theorems for the Nonsynchronized Channel (IEEE Trans. (IT))
- B. Coppi, Plasma Collective Modes Involving Geometry and Velocity Spaces (Nuovo Cimento)
- P. Elias, Bounds and Asymptotes for the Performance of Multivariate Quantizers (Ann. Math. Statist.)
- J. Foley, Prothesis in the Latin Verb sum (Language)
- C. W. Garland and D. B. Novotny, Ultrasonic Velocity and Attenuation in  $\text{KH}_2\text{PO}_4$  (Phys. Rev.)
- C. W. Garland and R. A. Young, Elastic Constants of Ammonium Bromide. II. High-Pressure Ultrasonic Investigation of the Phase Transitions (J. Chem. Phys.)
- C. W. Garland and D. D. Snyder, Ultrasonic Attenuation near the Lambda Transition in  $\text{NH}_4\text{Cl}$  at High Pressures (J. Phys. Chem. Solids)
- J. I. Glaser, Numerical Solution of Waveguide Scattering Problems by Finite-Difference Green's Functions (IEEE Trans. (MTT))
- J. S. Gruber, Topicalization in Child Language (Foundations of Language)

JOURNAL PAPERS ACCEPTED FOR PUBLICATION (continued)

- D. A. Hart and N. L. Oleson, Experimental Study of Tonks-Dattner Resonances in Rare-Gas Plasmas (J. Appl. Phys.)
- J. J. Katz, Interpretative Semantics vs Generative Semantics (Foundations of Language)
- C. W. Kim, The Vowel System of Korean (Language)
- J. A. Kong, Interaction of Acoustic Waves with Moving Media (J. Acoust. Soc. Am.)
- Y-S. Lou and R. E. Stickney, Velocity Distribution Measurements for Near-free Molecule Flow through an Orifice (Phys. Fluids)
- G. H. Matthews, Some Notes on the Proto-Siouan Continuants (Int. J. Am. Linguistics)
- M. L. Meeks, J. C. Carter, A. H. Barrett, P. R. Schwartz, J. W. Waters, and W. E. Brown III, Water Vapor: Observations of Galactic Sources (Science)
- E. Peper and T. Mulholland, Methodological and Theoretical Problems in the Voluntary Control of Electroencephalographic Occipital Alpha by the Subject (Kybernetik)
- E. Peper, Feedback Regulation of the Alpha Electroencephalogram Activity through Control of the Internal and External Parameters (Kybernetik)
- J. L. Ramsey, Realization of Optimum Interleavers (IEEE Trans. (IT))
- D. J. Rose, Engineering Feasibility of Controlled Fusion (Nucl. Fusion)
- N. E. Schumaker and C. W. Garland, Infrared Investigation of Structural and Ordering Changes in Ammonium Chloride and Bromide (J. Chem. Phys.)
- A. Schwartz, Derivative Functions in Syntax (Language)
- P. R. Schwartz and A. H. Barrett, Observations of Water-Vapor Emission Associated with Infrared Stars (Astrophys. J.)
- E. N. Spithas and W. M. Manheimer, Interaction of Three Plasma Waves in a Cylindrical Waveguide (Phys. Fluids)
- R. M. Strong and D. E. Troxel, An Electrotactile Display (IEEE Trans. (Man-Machine Systems))
- J. M. Sutton, D. H. Staelin, R. M. Price, and R. Weimar, Three Pulsars with Marching Subpulses (Astrophys. J.)
- W. J. Wilson, A. H. Barrett, and J. M. Moran, OH Radio Emission Associated with Infrared Stars (Astrophys. J.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- N. Ceglio and L. M. Lidsky, Ion Acoustic Wave Propagation near the Ion Cyclotron Frequency (Phys. Fluids)
- D. L. Fehrs, T. J. Lee, B. J. Hopkins, and R. E. Stickney, Comments on: An Electron Diffraction Study of Cesium Adsorption on Tungsten (Surface Sci.)
- D. B. Geselowitz, Comment on the Core Conductor Model (Biophys. J.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION (continued)

- D. Muehlner and R. Weiss, A Measurement of the Isotropic Background Radiation in the Far Infrared (Phys. Rev. Letters)
- M. Murakami and L. M. Lidsky, Growth and Damping of Wave-Particle Interactions in Counterstreaming Electron Beams (Phys. Rev. Letters)
- D. Ozonoff, An Attack on 'A Defense of Vitalism' (J. Theoret. Biol.)
- J. F. Parrish, C. H. Perry, and R. P. Lowndes, Far Infrared Stark and Zeeman Splittings of  $ER^{3+}$  in the Lanthanide Fluorides (Phys. Letters)
- E. K. Parks, J. L. Kinsey, and J. W. Riehl, Multistate Nuclear Relaxation in  $He-H_2$  (J. Chem. Phys.)
- R. M. Price, An Extension of the 408-MHz Southern Milky Way Survey and Assignment of an Absolute Base Level (Australian J. Phys.)
- D. H. Staelin and J. M. Sutton, Observed Shapes of Crab Nebula Radio Pulses (Nature (Letter))
- D. H. Staelin, M. S. Ewing, R. M. Price, and J. M. Sutton, Slow Periodic Variations in Pulsars (Astrophys. J.)

TECHNICAL REPORTS PUBLISHED

(This 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)

- 474 Seppo J. Halme, Efficient Optical Communication in a Turbulent Atmosphere  
NASA SP-217 R. S. Kennedy and S. Karp (eds.), Optical Space Communication (National Aeronautics and Space Administration, Washington, D.C., 1969)

SPECIAL PUBLICATIONS

- Margaret Bullowa, The Start of the Language Process (Actes du X<sup>e</sup> Congrès International des Linguistes, Bucarest, 28 Août - 2 Septembre 1967, Vol. III, pp. 191-200)
- D. L. Fehrs, T. J. Lee, and R. E. Stickney, Measurements of the Work Function and Desorption Energy of Cesium and Potassium on (100) Tungsten (IEEE Report on 1968 Thermionic Conversion Specialist Conference)
- C. W. Garland and N. E. Schumaker, Infrared Investigation of Ordering and Structural Changes in Ammonium Halides (in Molecular Dynamics and Structure of Solids, NBS Special Publ. No. 301, pp. 241-243, 1969)
- P. G. Katona, J. W. Poitras, and G. O. Barnett, Asymmetry in the Carotid Sinus Reflex (in Introduction to Biocybernetics. John Wiley and Sons, Inc., New York)
- J. E. Lisman and J. E. Brown, Steady-State Voltage-Clamps (I - V) Curves by Voltage Clamp of Limulus Ventral Eye Photoreceptors (Fed. Proc. Abstracts)

SPECIAL PUBLICATIONS (continued)

J. L. Massey, Applications of Automata Theory in Coding (in Applied Automata Theory. Academic Press, Inc., New York, 1968, pp. 125-146)

Paula Menyuk, Speech Development (a chapter in A Handbook of Speech Pathology, Audiology and Speech Science, Harvey Halpern (ed.). Random House, Inc., New York)

J. R. Ross, Gapping and the Order of Constituents (in Actes du X<sup>e</sup> Congrès International des Linguistes, Bucarest, 28 Août - 2 Septembre 1967)

O. J. Tretiak, Pattern Recognition and Waveform Analysis (NEREM - 69 Record)