

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

COSPAR Symposium on Approaches to Earth Survey Problems through the Use of Space Techniques, Konstanz, Germany

May 23 - June 6, 1973

W. L. Smith, D. H. Staelin, and J. T. Houghton, Vertical Temperature Profiles from Satellites - Results from Second Generation Instruments Aboard Nimbus-5

27th Annual Frequency Control Symposium, Cherry Hill, New Jersey

June 12-14, 1973

L. A. Hackel, D. G. Youmans, and S. Ezekiel, Molecular Beam Stabilized Laser

"Seminaire G.U.T.S." Centre d'Etudes Nucléaires de Grenoble, Grenoble, France

June 14-15, 1973

A. V. Oppenheim, Homomorphic Deconvolution

140th Meeting, American Astronomical Society, Columbus, Ohio

June 25-28, 1973

J. H. Spencer and B. F. Burke, A Search for Radio Emission from S Andromedae

Laser Spectroscopy Conference, Vail, Colorado

June 25-29, 1973

S. Ezekiel, Molecular Beam Spectroscopy with Argon and Dye Lasers

1973 Device Research Conference, University of Colorado, Boulder, Colorado

June 26-28, 1973

A. Bers and J. M. Smith, Surface Acoustoelectric Convolvers

Fourth International Conference on Molecular Beams, Cannes, France

July 9-12, 1973

L. A. Hackel, D. G. Youmans, and S. Ezekiel, Laser Molecular Beam Techniques for High Resolution Spectroscopy

D. G. Youmans, L. A. Hackel, and S. Ezekiel, Long-Term Laser Frequency Stabilization Using a Molecular Beam Reference

Sixth Conference on Numerical Simulation of Plasmas, Lawrence Berkeley Laboratory, Berkeley, California

July 16-18, 1973

J. L. Kulp, A. Bers, and J. Moses, New Capabilities for Symbolic Computation in Plasma Physics

Joint Services Electronics Program Topical Review, Stanford University, Stanford, California

August 8-9, 1973

A. Bers, Acoustic Surface Wave Interactions with Semiconductor Surfaces

MEETING PAPERS PRESENTED (continued)

31st Annual Meeting, Electron Microscopy Society of America, New Orleans, Louisiana

August 14-17, 1973

M. G. R. Thomson, A Spherical-Aberration Corrector Using Electron-Transparent Conducting Foils

"Auditory Analysis and Perception of Speech" Symposium, Leningrad, USSR

August 21-24, 1973

K. N. Stevens, Evidence for Quanta in the Production and Perception of Speech

K. N. Stevens, Potential Role of Property Detectors in the Perception of Consonants

JOURNAL PAPERS ACCEPTED FOR PUBLICATION

(Reprints, if available, may be obtained from the Document Room, 36-412, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139)

- B. Coppi and J. Rem, Current Driven Modes in Two-Dimensional Plasma Configurations (Phys. Fluids)
- R. E. Crochiere, On the Location of Zeros and a Reduction in the Number of Adds in a Digital Ladder Structure (IEEE Trans. (AE))
- A. E. Dabiri, V. S. Aramati, and R. E. Stickney, AES Measurements of Adsorption Isobars for Oxygen on Tungsten at Low Pressure and High Temperature (Surface Sci.)
- T. H. Dupree, Theory of Two-Dimensional Turbulence (Phys. Fluids)
- E. R. Gruberg and G. A. Greenhouse, The Relationship of Acetylcolinesterase Activity to Optic Fiber Projections in the Tiger Salamander Ambystoma tigrinum (J. Morphol.)
- E. R. Gruberg and G. A. Greenhouse, Neurotransmitter Synthesis in the Tectum of the Tiger Salamander Ambystoma tigrinum (Brain Res.)
- U. Ingard and V. K. Singhal, Upstream and Downstream Sound Radiation into a Moving Fluid (J. Acoust. Soc. Am.)
- P. Kiparsky, The Inflectional Accent in Indo-European (Language)
- D. H. Klatt, Interaction between Two Factors that Influence Vowel Duration (J. Acoust. Soc. Am.)
- J. A. Kong, Reply to Someda's comment on "Theorems of Bianisotropic Media" by J. A. Kong, [Proc. IEEE 60, 1036-1046 (1972)] (Proc. IEEE)
- R. S. Lowder and K. I. Thomassen, A Model of Kink Modes and Their Feedback Stabilization (Phys. Fluids)
- J. M. Moran, G. D. Papadopoulos, B. F. Burke, K. Y. Lo, P. R. Schwartz, D. L. Thacker, K. J. Johnston, S. H. Knowles, A. C. Reisz, and I. I. Shapiro, Very Long-Baseline Interferometric Observations of the H₂O Sources in W49N, W3(OH), Orion A, and VY Canis Majoris (Astrophys. J.)

JOURNAL PAPERS ACCEPTED FOR PUBLICATION (continued)

- G. D. Papadopoulos, Analog Multiplication at High Frequencies with a High Dynamic Range (IEEE J. Solid-State Circuits)
- M. W. P. Strandberg and J. R. Shane, Erratum: General Properties of Thermal Relaxation Rate Equations [Phys. Rev. B 7, 4809 (1973)] (Phys. Rev. B)
- J. P. Sullivan, Sheila E. Widnall, and S. Ezekiel, A Study of Vortex Rings Using a Laser Doppler Velocimeter (J. AIAA)
- J. C. Weaver and J. G. King, The Molecule Microscope: A New Instrument for Biological and Biomedical Research (Proc. Natl. Acad. Sci. U.S.)
- D. G. Youmans, L. A. Hackel, and S. Ezekiel, High-Resolution Spectroscopy of I₂ Using Laser-Molecular-Beam Techniques (J. Appl. Phys.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- S. A. Cohen and J. G. King, Measurement of Lifetimes and Binding Energies of Atoms Adsorbed on Surfaces at Low Temperatures by a Rapid Flash Desorption Technique (Phys. Rev. Letters)
- R. E. Grove, F. Y. Wu, L. A. Hackel, D. G. Youmans, and S. Ezekiel, Jet Stream cw Dye Laser for High Resolution Spectroscopy (Appl. Phys. Letters)
- P. D. Henshaw and S. Ezekiel, High Resolution Holographic Contour Generation Using a Pulsed Multicolor Ion Laser (Appl. Opt.)
- K. Y. Lo and K. P. Bechis, Anomalous 1720 MHz OH Emission from V1057 Cyg (Astrophys. J. Letters)
- J. H. Spencer and B. F. Burke, A Search for Radio Emission from S Andromeda (Astrophys. J. Letters)
- A. Treves, Importance of Pulsar Observations for Planetary Physics (Astron. Astrophys.)

SPECIAL PUBLICATIONS

- C. Braccini and A. V. Oppenheim, Applications of Digital Frequency Warping to Unequal Bandwidth and Vernier Spectrum Analysis (Proc. Conference on Signal Processing, University of Erlangen, Erlangen, Germany, April 4-6, 1973), pp. 71-85
- K. Hale, Person Marking in Walbiri, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 308-344
- K. U. Ingard, Interaction of Sound and Fluid Flow (Symposium on Atmospheric Acoustics and Noise Propagation, National Bureau of Standards, Gaithersburg, Maryland, September 27-29, 1972) (J. Acoust. Soc. Am. 52, 1310 (November 1972))
- U. Ingard, V. K. Singhal, and A. G. Galaitis, Studies of Duct Lines and the Interaction of Sound and Flow in Ducts (Proc. Interagency Symposium on Research in Transportation Noise, Stanford University, Stanford, California, March 28-30, 1973), Vol. II, pp. 430-440

SPECIAL PUBLICATIONS (continued)

- U. Ingard and V. K. Singhal, Upstream and Downstream Sound Radiation into a Moving Fluid (Proc. 85th Meeting, Acoustical Society of America, Boston, Massachusetts, April 10-13, 1973), Vol. 54, p. 306
- U. Ingard and V. K. Singhal, The Attenuation of Sound in Turbulent Pipe Flow (Proc. 85th Meeting, Acoustical Society of America, Boston, Massachusetts, April 10-13, 1973), Vol. 54, p. 306
- J. J. Katz, Compositionality, Idiomaticity, and Lexical Substitution, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 357-376
- P. Kiparsky, "Elsewhere" in Phonology, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 93-106
- W. O'Neil, Some Remarks on Old and Middle English Stress, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 158-173
- A. V. Oppenheim, Some Digital Signal Processing Activities at M.I.T. (Proc. Conference on Signal Processing, University of Erlangen, Erlangen, Germany, April 4-6, 1973), pp. 27-31
- D. M. Perlmutter and J. Orešnik, Language-Particular Rules and Explanation in Syntax, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 419-459
- J. R. Ross, Leftward, Ho!, in P. Kiparsky and S. Anderson (Eds.), Festschrift for Morris Halle (Holt, Rinehart, and Winston, New York, 1973), pp. 166-173
- W. M. Siebert, Stochastic Limitations on Sensory Performance, in J. Cowen (Ed.), Some Mathematical Questions in Biology (American Mathematical Series, American Mathematical Society, Providence, Rhode Island, 1973), pp. 49-74
- D. H. Staelin, F. T. Barath, A. H. Barrett, J. C. Blinn, N. E. Gaut, E. J. Johnston, K. Kunzi, W. B. Lenoir, W. Nordberg, R. Pettyjohn, R. K. L. Poon, P. W. Rosenkranz, and J. W. Waters, Preliminary Results from the Nimbus 5 Microwave Spectrometer Experiment (abstract) (Proc. 54th Annual Meeting, American Geophysical Union, Washington, D.C., April 16-20, 1973), p. 277