

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Chicago Literary Club, Chicago
Dec. 2, 1957

W. S. McCulloch, The natural fit (invited)

Thirty-Second Annual Meeting of the Linguistic Society of America, Chicago
Dec. 27-29, 1957

M. Halle, On the phonetic rules of Russian

R. B. Lees, Generation of nominal compounds in English

G. H. Matthews, Object incorporation in Siouan

J. R. Applegate, Morpheme boundaries and phonetic rules of Shilha

Lever Research Branch, RESA, Edgewater, N. J.
Jan. 7, 1958

W. S. McCulloch, Stability of biological computers (invited)

IRE, PGMTT, Buffalo, N. Y.
Jan. 8, 1958

M. W. P. Strandberg, Quantum-mechanical amplifiers

Reactor Division Seminar, Argonne National Laboratory, University of Chicago,
Lemont, Ill.
Jan. 9, 1958

S. C. Brown, Production of steady-state plasmas in magnetic fields at low pressure
(invited)

Conference on Methodology and Problems in Artificial Internal Organs, The Rockefeller
Institute, New York
Jan. 15, 1958

W. A. Rosenblith, Information and control for organ systems (invited)

Conference on the Physics of Electronic and Atomic Collisions, New York University
Jan. 27-28, 1958

G. Bekefi and S. C. Brown, Microwave determination of the collision cross section
and of the energy loss of slow electrons in hydrogen

B. B. Aubrey and L. C. Bradley III, Unequal populations of closely spaced energy
levels in atoms excited by electron impact

MEETING PAPERS PRESENTED (continued)

American Institute of Physics Meeting, New York
Jan. 29-Feb. 1, 1958

C. F. Davis, Jr., M. W. P. Strandberg, and R. L. Kyhl, Solid-state masers and spin-lattice relaxation times

American Physical Society Meeting, New York
Jan. 30, 1958

S. C. Brown, Basic problems in low-pressure plasmas (invited)

Twenty-Second Annual Meeting of the Peripatetic Club, Boston
Jan. 31-Feb. 1, 1958

W. A. Rosenblith, Electronic computers as instruments in the study of neurophysiology (invited)

Conference on Photoreception, The New York Academy of Sciences, New York
Jan. 31-Feb. 1, 1958

W. S. McCulloch, What is behind the eye (invited)

National Meeting of the Biophysical Society, Boston
Feb. 5-7, 1958

J. S. Barlow, Rhythmic activity induced by photic stimulation in man in relation to intrinsic alpha activity

N. Y-S. Kiang and T. T. Sandel, Some characteristics of "off" responses from the cat's auditory cortex

B. G. Farley, L. S. Frishkopf, M. Z. Freeman, C. Molnar, and T. Weiss, A summary description of EEG data with the aid of a digital computer

M. H. Goldstein, Jr. and N. Y-S. Kiang, A probabilistic interpretation of electrical responses evoked by sensory stimuli

P. D. Wall, Repetitive firing of nerve cells

Transistor and Solid State Circuits Conference, Philadelphia
Feb. 12, 1958

C. R. Hurtig, Dielectric modulators with the space-charge capacitance of junction diodes

IRE, Princeton Section, Princeton, N. J.
Feb. 13, 1958

W. S. McCulloch, Reliable performance of complicated nets of unreliable components

MEETING PAPERS PRESENTED (continued)

IRE National Convention, New York
March 24-27, 1958

- W. M. Siebert, Some applications of detection theory to radar
M. A. Epstein, Algebraic decoding for a binary erasure channel

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.)

- E. J. Baghdady, Theory of stronger-signal capture in FM reception (Proc. IRE)
S. C. Brown, High-frequency gas-discharge breakdown in the presence of magnetic
fields (Nuovo cimento)
N. Chomsky and G. A. Miller, Finite state languages (Information and Control)
M. Halle, Review of "Language as Choice and Chance" by G. Herdan (Kratylus)
H. A. Haus, The kinetic power theorem for parametric, longitudinal, electron-beam
amplifiers (Trans. IRE, PGED)
H. A. Haus, Power-flow relations in lossless nonlinear media (Trans. IRE, PGMTT)
H. A. Haus and R. B. Adler, Optimum noise performance of linear amplifiers (Proc.
IRE)
P. M. Lewis II, Synthesis of sampled-signal networks (Trans. IRE, PGCT)
W. B. Nottingham, Review of "Electron Impact Phenomena and the Properties of Gas-
eous Ions" by F. H. Field and J. S. Franklin (Science)
M. W. P. Strandberg, The design of examinations and the interpretation of grades
(Am. J. Phys.)
M. W. P. Strandberg, Spin-lattice relaxation (Phys. Rev.)
J. K. D. Verma, A low-noise 30-mc amplifier (Rev. Sci. Instr.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- E. F. Bolinder, Note on impedance transformations by the isometric circle method
(Trans. IRE, PGMTT)
F. A. Cotton, J. W. George, and J. S. Waugh, The nuclear resonance spectrum and
structure SF₄ (J. Chem. Phys.)
M. W. P. Strandberg, C. F. Davis, Jr., B. W. Faughnan, R. L. Kyhl, and G. J. Wolga,
Operation of a solid-state quantum-mechanical amplifier (Phys. Rev.)
L. Tisza, Generalized phase rule and the symmetry of the superfluid state (Phys. Rev.)

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.)

- 313 P. R. Swan, Jr. and M. W. P. Strandberg, Vibration-internal rotation interactions in molecules containing a symmetric-top group
- 317 C. S. Lorens, Theory and applications of flow graphs
- 323 M. H. Goldstein, Jr., Neurophysiological representation of complex auditory stimuli
- 326 H. E. White, An analog probability density analyzer
- 328 R. D. Larrabee, The spectral emissivity and optical properties of tungsten
- 331 R. E. Wernikoff, A theory of signals
- 334 R. D. Thornton, Active RC networks
- 335 P. Elias, List decoding for noisy channels
- 337 B. G. Farley, L. S. Frishkopf, W. A. Clark, Jr., and J. T. Gilmore, Jr., Computer techniques for the study of patterns in the electroencephalogram
- 338 J. V. Harrington, On the statics and dynamics of magnetic domain boundaries

SPECIAL PUBLICATIONS

- R. Jakobson and M. Halle, Phonology in relation to phonetics, Chap. 14, Manual of Phonetics, edited by L. Kaiser (North Holland Publishing Company, Amsterdam, 1957)