

## PUBLICATIONS AND REPORTS

### MEETING PAPERS PRESENTED

AIEE Lynn Section, Lynn, Massachusetts  
March 15, 1955

R. M. Fano, Two bits worth of information.

IRE National Convention, New York  
March 21-24, 1955

A. G. Bose and S. D. Pezaris, A theorem concerning noise figures.  
N. DeClaris, A method of rational function approximation for network synthesis.  
P. Elias, Coding for noisy channels.  
R. M. Fano, Session commentary (information theory).  
E. A. Guillemin, Summation and outlook (network synthesis).  
W. S. McCulloch, Brain, a computer with negative feedback.  
F. M. Reza, A generalization of Foster's and Cauer's theorems.  
R. E. Scott, The use of potential analogs in network synthesis.  
R. E. Scott and Y. C. Ho, Delay-line method for compensating closed-loop systems in the time domain.  
J. R. Zacharias, J. G. Yates, and R. D. Haun, Jr., An atomic frequency standard.

Department of Electrical Engineering, University of Toronto, Toronto  
March 31-April 1, 1955

R. M. Fano, Four lectures on information theory.

Society of Experimental Psychologists, Brown University, Providence, R. I.  
April 8, 1955

J. C. R. Licklider, Periodicity pitch.

Symposium on Modern Network Synthesis, Polytechnic Institute of Brooklyn  
April 13-15, 1955

E. A. Guillemin, New methods of driving-point and transfer impedance synthesis.  
M. Strieby, A Fourier method for time domain synthesis.

IRE PGCT on Signal Flow Graphs, Philadelphia  
April 14, 1955

S. J. Mason, Signal-flow-graphsmanship.

International Symposium on Electrical Discharge in Gases, Delft, Netherlands  
April 25-30, 1955

S. C. Brown, Microwave gas discharge breakdown (invited paper).

## MEETING PAPERS PRESENTED (continued)

American Physical Society, Washington, D. C.  
April 28-30, 1955

- C. E. Chase and M. A. Herlin, Ultrasonic measurements in magnetically cooled liquid helium.
- L. D. Jennings, Jr., and M. A. Herlin, Thermodynamic properties of chrome alum.
- D. Kivelson and D. R. Lide, Jr., Internal motion in methyl amine.
- H. H. Kolm and M. A. Herlin, A new method for measuring the absolute viscosity of liquid helium II.
- M. Peter and M. W. P. Strandberg, Molecular-beam microwave-absorption spectroscopy.
- M. W. P. Strandberg, Electronic contribution to effective nuclear masses in molecules.
- P. R. Swan and M. W. P. Strandberg, Excited torsional states in asymmetric hindered rotors.

Symposium on Circuit Analysis, University of Illinois, Urbana  
May 16-18, 1955

- D. A. Huffman, Philosophies of sequential circuit behavior.

The 584th Meeting of the Boston Society of Psychiatry and Neurology, Boston  
May 19, 1955

- J. Y. Lettvin, W. S. McCulloch, W. H. Pitts, and P. D. Wall, Central effects of strychnine on afferent fibres.

## JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints of these and previous articles still in print are available from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- R. B. Adler and S. J. Fricker, Notes on the flow of scheduled air traffic (IRE Trans. PGANE)
- S. C. Brown, Microwave gas discharge breakdown (Appl. Sci. Res.)
- E. A. Guillemin, New methods of driving-point and transfer impedance synthesis (Proc. Symp. on Modern Network Synthesis, Polytechnic Institute of Brooklyn)
- H. A. Haus and F. N. H. Robinson, The minimum noise figure of microwave beam amplifiers (Proc. IRE)
- D. A. Huffman, Philosophies of sequential circuit behavior (Proc. Symp. on Circuit Analysis, University of Illinois)
- A. R. Hutson, Velocity analysis of thermionic emission from single-crystal tungsten (Phys. Rev.)
- J. A. Miller, A. S. Soltes, and R. E. Scott, A wideband function multiplier (Electronics)

## JOURNAL ARTICLES ACCEPTED FOR PUBLICATION (continued)

- F. M. Reza, An introduction to a qualitative synthesis of linear passive networks in the time domain (Proceedings of the National Electronics Conference)
- G. J. Schulz and S. C. Brown, Microwave study of positive ion collection by probes (Phys. Rev.)
- M. Strieby, A Fourier method for time domain synthesis (Proc. Symp. on Modern Network Synthesis, Polytechnic Institute of Brooklyn)
- M. Tinkham and M. W. P. Strandberg, Line breadths in the microwave magnetic resonance spectrum of oxygen (Phys. Rev.)
- C. M. Witcher, Electronic travel aids (The Blind Professional Journal and The New Outlook for the Blind)

## LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- E. J. Baghdady, More on inertiance (Proc. IRE)
- R. T. Daly, Jr., and J. H. Holloway, The nuclear magnetic octupole moments of the stable gallium isotopes (Phys. Rev.)
- P. M. Lewis II, Voltage transfer synthesis (IRE Trans. PGCT)

## TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports may be obtained from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- 260 A. R. Hutson, Velocity analysis of thermionic emission from single-crystal tungsten.
- 281 M. Tinkham and M. W. P. Strandberg, Theory of the fine structure of the molecular oxygen ground state and the measurement of its paramagnetic spectrum.
- 285 P. Elias, Error-free coding.
- 287 N. DeClaris, An approximation method with rational functions.
- 289 M. Schetzen, Printed microwave systems.
- 290 A. J. Lichtenberg, Helical coupling system.
- 292 F. Bitter, The optical properties of atomic vapors near resonance.
- 295 A. L. McWhorter,  $1/f$  noise and related surface effects in germanium.