Contributors to This Issue

- Dirk J. Bartelink, B. Sc., 1956, University of Western Ontario; M.S., 1959, and Ph.D., 1962, Stanford University; Bell Laboratories, 1961–1973. Mr. Bartelink has been engaged in fundamental studies of hot electrons in semiconductors and waves in solid-state plasmas. He has supervised a group concerned with various active solid-state devices, including characterization of the TRAPATT microwave diode. Before leaving Bell Laboratories, he investigated the physical processes of image recording on thin metallic films. Member, American Physical Society, IEEE.
- William F. Bodtmann, Monmouth College, 1957–61; Bell Laboratories, 1941—. Mr. Bodtmann has been engaged in research on longand short-haul microwave radio systems, frequency feedback receivers, and FM multiplex systems. He is presently engaged in work associated with communication systems operating at millimeter wavelengths.
- Edgar N. Gilbert, B.S., 1943, Queens College; Ph.D., 1948, Massachusetts Institute of Technology; M.I.T. Radiation Laboratory, 1944–1946; Bell Laboratories, 1948—. Mr. Gilbert has done research in several branches of applied mathematics and is interested in communication theory. Member, American Mathematical Society, IEEE.
- B. Gopinath, M.S. (Mathematical Physics), 1964, University of Bombay, India; M.S.E.E. and Ph.D. (E.E.), 1968, Stanford University; Postdoctoral Research Associate, Stanford University, 1967–1968; Bell Laboratories, 1968—. Mr. Gopinath's primary interest, as a member of the Mathematics of Physics and Networks Department, is in the applications of mathematical methods to physical problems.
- D. L. Jagerman, B.E.E., 1949, Cooper Union; M.S., 1954, and Ph.D. (Mathematics), 1962, New York University; Bell Laboratories, 1964—. Mr. Jagerman has been engaged in mathematical research on numerical quadrature theory, interpolation, mathematical properties of pseudorandom number generators, dynamic programming, approximation theory, and widths and entropy with application to the storage and transmission of information. His recent work concerns the theory of queuing systems and its applications to telephone traffic problems. Member, Pi Mu Epsilon.

Jessie MacWilliams (Mrs. F. J.), B.A., 1939, M.A., 1941, Cambridge University (England); Ph.D., 1962, Harvard University; Bell Laboratories, 1956—. Mrs. MacWilliams has worked in transmission networks development and data communications engineering, and is now in the Mathematics and Statistics Research Center. Member, Mathematical Association of America, American Mathematical Society.

Debasis Mitra, B.Sc. (E.E.), 1964, and Ph.D. (E.E.), 1967, University of London; United Kingdom Atomic Energy Authority Research Fellow 1965–1967; University of Manchester, U.K., 1967–1968; Bell Laboratories, 1968—. Mr. Mitra, a member of the Mathematics of Physics and Networks Department, is interested in the application of mathematical methods to physical problems.

G. Persky, B.S.E.E., 1959, Rensselaer Polytechnic Institute; M.S.E.E., 1961, and Ph.D. (Physics), 1968, Polytechnic Institute of Brooklyn; Bell Laboratories, 1967—. Mr. Persky has worked on problems of high-field transport in semiconductor devices. He is now engaged in software development for computer-aided design of integrated circuits. Member, IEEE, American Physical Society, Sigma Xi, Tau Beta Pi, Eta Kappa Nu.

Clyde L. Ruthroff, B.S.E.E., 1950, and M.A., 1952, University of Nebraska; Bell Laboratories, 1952—. Mr. Ruthroff has published contributions on the subjects of FM distortion theory, broadband transformers, FM limiters, threshold extension by feedback, microwave radio systems, rain attenuation, multiple-path propagation, linear phase modulators, and injection-locked FM receivers. He is interested in the extension of radio communication into the millimeter and optical wavelengths. Member, Sigma Xi, American Association for the Advancement of Science.

Andres C. Salazar, B.A. (Math), B.S.E.E., 1964, M.S., 1965, University of New Mexico; and Ph.D., 1967, Michigan State University; Bell Laboratories, 1967—. Mr. Salazar has been engaged in the statistical evaluation of data set performance on the switched telephone network. His current interests are in the areas of digital filter design and equalization techniques for voiceband data transmission systems. Member, IEEE, Phi Kappa Phi.

- Neil J. A. Sloane, B.E.E., 1959, and B.A. (Hons.), 1960, University of Melbourne, Australia; Postmaster General's Department, Commonwealth of Australia, 1956–1961; M.S., 1964, and Ph.D., 1967, Cornell University; assistant professor of electrical engineering, Cornell University, 1967–1969; Bell Laboratories, 1969—. Mr. Sloane is engaged in research in coding theory, communication theory, and combinatorial mathematics. Member, IEEE, American Mathematical Society, Mathematical Association of America.
- M. M. Sondhi, B.S. (Honours), 1950, Delhi University (Delhi, India); D.I.I.Sc., 1953, Indian Institute of Science (Bangalore, India); M.S., 1955, and Ph.D., 1957, University of Wisconsin; Bell Laboratories, 1962—. Mr. Sondhi is working on problems concerning the processing and transmission of speech signals and modeling the detection of auditory and visual signals by human beings.