

## Foreword

The Symposium on Signal Statistics was held December 6 and 7, 1963 in Seattle, Wash. Its purpose was threefold: (a) to make a definitive statement of the present status of signal statistics, (b) to present current research in this field, and (c) to discuss important open problems.

The need for such a symposium was first suggested at the October 1961 URSI meeting. With the approval of the USNC of URSI in May 1963, it became feasible to hold the symposium in conjunction with the December 1963 URSI meeting, a combination that afforded a favorable opportunity to bring together interested workers in these fields. A total of 180 persons participated.

The cosponsors of the symposium were the U.S. National Committee of URSI, the Boeing Scientific Research Laboratories, and the University of Washington.

The participants were welcomed by short, informative, and entertaining talks by Dr. J. C. Noyes, Symposium Cochairman; Dean W. R. Hill of the University of Washington; and Mr. G. L. Hollingsworth, Director of BSRL. In the technical keynote address, Dr. F. L. H. M. Stumpers of Philips Eindhoven assembled a comprehensive history of the subject and set the stage for the succeeding papers. The wide variety of subjects covered by the fifteen invited technical papers that followed indicated the encompassing nature of the topic "signal statistics." The three sessions of the day-and-a-half long symposium were devoted to mathematical theory, scattering phenomenology and statistical distributions, and applied problems involving signal statistics. An evening panel session, moderated by Dr. F. L. H. M. Stumpers, on recent trends in research, some desirable directions for further work, and important open problems was a feature of the meeting. The diversity of views and the informal discussion were notable, as were the questions and answers following the formal papers.

An acknowledgment of the efforts of the many people who contributed to the success of the Symposium is due. The speakers, of course, deserve credit not only for excellent oral presentations but also for delivering their manuscripts to the editors within a relatively tight time schedule. Thanks are also due the referees, who contributed generously of their time and suggestions. The local organizing committee was composed of: Cochairmen, Dr. J. C. Noyes, BSRL, and Professor H. M. Swarm, University of Washington; Vice-chairman, Professor A. Ishimaru, University of California, Berkeley, on leave from the University of Washington; Technical Program Cochairmen, Dr. C. I. Beard, BSRL, and Dr. W. C. Hoffman, BSRL; Secretary, Professor I. C. Peden, University of Washington; Treasurer, Mr. A. W. Biggs, Boeing Aero-Space Division; Arrangements, Mr. H. A. Roche, BSRL; Publicity, Professor D. K. Reynolds, University of Washington. Special thanks are due the Boeing Scientific Research Laboratories for generous financial support and the University of Washington for providing its facilities.

C. I. BEARD, *Guest Editor*.

W. C. HOFFMAN, *Guest Editor*.