

Entire Functions and Related Parts of Analysis

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Edited by
Jacob Korevaar,
(Coordinating editor)
S. S. Chern
Leon Ehrenpreis
W. H. J. Fuchs
L. A. Rubel

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Preface

The present volume is a direct outcome of the Society's thirteenth Summer Research Institute, the topic of which was Entire Functions and Related Parts of Analysis.

The Institute was organized by a committee consisting of A. Beurling, R. P. Boas (chairman), L. Ehrenpreis, W. H. J. Fuchs, J. Korevaar and L. A. Rubel. It was held from June 27 to July 22, 1966, at the University of California, San Diego, in La Jolla, with the undersigned as chairman. The primary objective of the Institute was to improve communication between the specialists in the different parts of the subject.

In order to acquaint the classically oriented participants with the new ideas and methods coming from various more abstract branches of mathematics, the following sections were set up:

Complex Analysis from the point of view of Mapping of Manifolds. In this section, organized by S. S. Chern, lectures were presented by E. Bishop, S. S. Chern (four), F. W. Gehring (two), B. Rodin, L. Sario (two), W. Stoll (two), and H. Wu.

Fourier Methods, a section organized by L. Ehrenpreis and dealing primarily with applications of complex Fourier analysis. Lectures were given by L. Coburn (two), L. Ehrenpreis (three), J. Kazdan (two), D. J. Newman (two), S. M. Shah, and P. van Goethem.

Function Spaces. This section, organized by L. A. Rubel, was devoted to methods derived from functional analysis and algebra. Lectures were presented by N. L. Alling, L. de Branges, J. J. Kelleher (two), H. J. Landau, B. Logan, L. A. Rubel (two), and B. A. Taylor (two).

The Institute participants of more modern orientation had ample opportunity to become acquainted with developments and problems in many active classical areas. Most of the papers dealing with classical topics were presented in the section on

Distribution of Values. In this section, organized by W. H. J. Fuchs, lectures were given by J. Clunie, E. F. Collingwood, H. Delange, W. H. J. Fuchs, D. Gaier, T. H. Ganelius, A. Gray, F. Gross, W. Hayman (two), A. Hyllengren, W. Al-Katifi, J. Korevaar (two), P. Lelong, B. Lepson, T. L. McCoy, P. Noverraz, C. Pommerenke, and A. Schumitzky.

Other lecturers on relatively classical topics included E. J. Akutowicz, A. Dvoretzky, P. Koosis, G. Labelle, A. L. Shields, and H. Wilf. During the final week of the Institute, L. Ehrenpreis organized a successful series of problem sessions.

All in all, the seventy-three participants in the Institute (including twenty-two from abroad) provided more than sixty formal lectures and a number of informal ones. Approximately half the speakers wrote up lecture notes which were distributed in offset form shortly after the Institute disbanded.

The Institute had a brief continuation at the Houston meeting of the Society, with a day-long session on January 25, 1967. The program included papers by E. F. Beckenbach, S. S. Chern, A. Edrei, W. H. J. Fuchs, J. Korevaar and S. Hellerstein, P. Malliavin, L. Nachbin and C. P. Gupta, L. A. Rubel, and W. Stoll.

All but one of the thirty-four articles in these Proceedings have at least one author who participated in the Institute. Approximately twenty of the papers correspond to a lecture given in the Institute; two major papers (by W. Stoll and B. A. Taylor) present solutions to a problem raised during the sessions.

For this publication, the editors decided against an organization by sections as in the Institute. No manuscripts were available for a majority of the lectures; the dividing lines between the sections had never been very clear; and several of the manuscripts did not fit into any of the original categories. For these reasons, the articles are simply arranged alphabetically by (first) author.

The volume ends with a problem section edited by L. Ehrenpreis. It provides a record of the problem sessions of the Institute, containing both the problems and a number of solutions.

On behalf of the organizing committee for the 1966 Summer Institute and the editorial committee for these Proceedings, the undersigned wishes to acknowledge the financial support received from the National Science Foundation under grant GP 5069, the hospitality provided by the University of California, San Diego, and the generous and able assistance supplied by the executive director of the Society, Dr. G. L. Walker, and his staff.

JACOB KOREVAAR
La Jolla, 1967

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