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### **Elliptic Boundary Value Problems** in Domains with Point Singularities

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Mathematical Surveys and Monographs, Volume 52; 1997; 414 pages; Hardcover; ISBN 0-8218-0754-4; List \$99; Individual member \$59; Order code SURV/52MC

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This book features the interplay of two main branches of mathematics: topology and real analysis. The mate-rial of the book is largely contained in the research publications of the authors and their students from the past 50 years.

Features:

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- Demonstrates the wide applicability of certain basic notions and techniques in measure theory and set-theoretic topology. Gives unified treatments of large bodies of
- research found in the literature

Mathematical Surveys and Monographs, Volume 54; 1997; 216 pages: Hardcover: ISBN 0-8218-0614-9: List \$69: Individual member \$41; Order code SURV/54MC

Józef Dodziuk and Linda Keen, City University of New York, New York City, Editors

The mathematical works of Lars Ahlfors and Lipman Bers are fundamental and lasting. They have influenced and altered the development of twentieth century mathematics. The personalities of these two scientists helped create a mathematical family and have had a permanent positive effect on a whole generation of mathematicians. Their mathematical heritage con-tinues to lead succeeding generations. In the fall of 1994, one year after Bers' death, some members of this family decided to inaugurate a series of conference The Bers Colloquium, to be held every three years. The theme was to be a topic in the Ahlfors-Bers mathematical tradition, broadly interpreted.

The first colloquium was held in October 1995 at the Graduate Center, CUNY in New York. It coincided roughly with the second anniversary of Bers' death. There were six lectures and much informal mathematical discussion. This volume contains papers by the speakers and many of the participants. The broad range of papers indicate how strong and far reaching Bers' influence has been.

- Features: Twenty-seven very high-level papers on related
  - topics
- Open problems Expository articles

Contemporary Mathematics, Volume 211; 1997; 488 pages; Softcover; ISBN 0-8218-0671-8; List \$71; Individual member \$43; Order code CONM/211MC

### **Optimization Methods in Partial Differential Equations**

Steven Cox, Rice University, Houston, TX, and Irena Lasiecka, University of Virginia, Charlottesville, Editors

This book presents a collection of papers written by specialists in the field and devoted to the analysis of various aspects of optimization problems with a common focus on partial differential equation (PDE) models. These papers were presented at the AMS-SIAM 1996 Joint Summer Research Conference held at Mount Holyoke College, South Hadley, MA, in June 1996.

The papers selected for this volume are at the forefront of research and point to modern trends and open problems. This book will be a valuable tool not only to specialists in the field interested in technical details, but also to scientists entering the field who are searching for promising directions for research.

Contemporary Mathematics, Volume 209; 1997; 349 pages Softcover; ISBN 0-8218-0604-1; List \$69; Individual member \$41; Order code CONM/209MC

### Some Points of Analysis and Their History

Lars Gårding, Lund University, Sweden

This book is a collection of small essays containing the history and the proofs of some important and interesting theorems of analysis and partial differential operators in this century. Most of the results in the book are associated with Swedish mathematicians. Also included are the Tarski-Seidenberg theorem and Wiener's classical results in harmonic analysis and a delightful essay on the impact of distributions in analysis. All mathematical points are fully explained, but some require a certain mature understanding from the read-This book is a well-written, simple work that offers full mathematical treatment, along with insight and fresh points of view.

This book is co-published with Higher Education Press (Beijing) and is distributed worldwide, except in the People's Republic of China, by the American Mathematical Society. University Lecture Series, Volume 11; 1997; 88 pages; Softcover; ISBN 0-8218-0757-9; List \$16; All AMS members \$13; Order code ULECT/11MC

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