CONTEMPORARY MATHEMATICS

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# Functional Analysis, Harmonic Analysis, and Image Processing: A Collection of Papers in Honor of Björn Jawerth

Michael Cwikel
Mario Milman
Editors

American Mathematical Society

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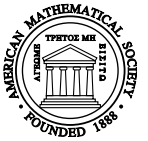


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# Preface

Björn Jawerth's passing was a painful personal and professional loss for us. As time passed, we came to feel that the best way to render a tribute to him would be to "let the mathematics do the talking". Thus, with the invaluable help of former collaborators, students, and colleagues of Björn, we have put together this collection of surveys and research articles on some of the areas in mathematics where his contributions were decisive. We have also included a brief biographical article about Björn, which we co-authored with Michael Frazier and Louise Jawerth. That article includes a list of Björn's papers, all those that were reviewed in the Mathematical Reviews, as well as a list of his doctoral students, which we compiled using the database of the Mathematics Genealogy Project.

As we believe this volume attests, Björn made very important mathematical contributions of lasting value in a wide range of topics. Our hope is that the collection offered here can serve as a source of inspiration for a new generation of mathematicians.

We are very grateful to all the contributing authors and the anonymous referees. We are also grateful to John Benedetto, Simeon Reich, and Alexander Zaslavski for their help with editorial matters and their encouragement at crucial stages of this project.

As on previous occasions, we were fortunate to have the expert editorial help of Christine Thivierge of the AMS, and we also thank her very warmly.

Michael Cwikel
(Haifa)

Mario Milman
(Buenos Aires and Delray Beach)

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This volume is dedicated to the memory of Björn Jawerth. It contains original research contributions and surveys in several of the areas of mathematics to which Björn made important contributions. Those areas include harmonic analysis, image processing, and functional analysis, which are of course interrelated in many significant and productive ways.

Among the contributors are some of the world's leading experts in these areas. With its combination of research papers and surveys, this book may become an important reference and research tool.

This book should be of interest to advanced graduate students and professional researchers in the areas of functional analysis, harmonic analysis, image processing, and approximation theory. It combines articles presenting new research with insightful surveys written by foremost experts.

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