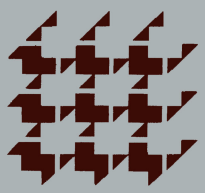

DIMACS

Series in Discrete Mathematics and Theoretical Computer Science

Volume 10

Expanding Graphs

Joel Friedman
Editor

American Mathematical Society

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Proceedings of a DIMACS Workshop
May 11–14, 1992

Joel Friedman
Editor

NSF Science and Technology Center
in Discrete Mathematics and Theoretical Computer Science
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This DIMACS volume resulting from the Special Year on Graph Theory and Algorithms contains research articles and extended abstracts from participants at the Expander Graphs Workshop held at DIMACS from May 11, 1992, through May 14, 1992.

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Foreword

This DIMACS volume on expander graphs contains abstracts or papers from talks at a workshop held at DIMACS, May 11–14, 1992.

We would especially like to thank Joel Friedman for putting together this Proceedings that has papers from so many outstanding researchers within this field.

This workshop was part of the DIMACS 1991–1992 Special Year on Graph Theory and Algorithms organized by Fan R. K. Chung and William T. Trotter.

Fred Roberts, Director
Robert Tarjan, Co-Director
Diane Souvaine, Associate Director

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Preface

The DIMACS Workshop on Expander Graphs took place at Princeton University, May 11–14, 1992. There were 70 participants. The program featured 22 talks and two open problem sessions. This volume contains much of the material covered at this workshop, in the form of unrefereed papers or summaries of the talks.

The field of expanding graphs involves a number of different fields of study, and gives rise to important connections between them. We were happy to have many of these fields represented at the workshop, including theoretical computer science, combinatorics, probability theory, representation theory, number theory, and differential geometry; the workshop was a wonderful opportunity to assemble researchers and topics with a diversity not usually found in more regular conferences and meetings. We received many positive responses from the participants of the workshop.

We would like to thank the DIMACS executive committee for sponsoring the workshop. Fan Chung, Daniel Gorenstein, Fred Roberts, Bob Tarjan, Tom Trotter, Pat Toci, Carol Rusnak, Adam Buchsbaum, and Ramesh Sitaraman all helped us greatly. We regret the untimely passing of Daniel Gorenstein, whose energies greatly contributed to DIMACS in many ways. Winnie Waring was of especial help in organizing the workshop. Persi Diaconis helped with the proposal for the workshop. We also wish to thank Christine Thivierge and Donna Harmon at the AMS for helping to prepare this volume.

Joel Friedman, Princeton
February 1993

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