CONTEMPORARY MATHEMATICS

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African Americans in Mathematics II

Fourth Conference for African-American Researchers in the Mathematical Sciences June 16–19, 1998 Rice University, Houston, Texas

> Nathaniel Dean Cassandra M. McZeal Pamela J. Williams Editors



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> Nathaniel Dean Cassandra M. McZeal Pamela J. Williams Editors



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This volume contains the proceedings of the Fourth Conference for African-American Researchers in the Mathematical Sciences held at the Center for Research on Parallel Computation (CRPC), Rice University, Houston, Texas, on June 16–19, 1998, with support from Bell Laboratories of Lucent Technologies, The Department of Energy, The National Security Agency, and the CRPC.

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Preface

The fundamental purpose of the Conference for African-American Researchers in the Mathematical Sciences (CAARMS) is to encourage, nurture, and promote existing and potential African-American researchers in the area. Researchers, primarily but not exclusively African-American, give one hour invited addresses about their work, and graduate students give poster presentations on current research. The talks and presentations bring a broader perspective to the critical issues involving minority participation in mathematics. During the conference, attendees also network and communicate, enhancing the growth of individual researchers as well as the general growth of mathematics among African-Americans.

Computer science and mathematics shared the spotlight at the Fourth Conference for African-American Researchers in the Mathematical Sciences held at the Center for Research on Parallel Computation (CRPC), Rice University, Houston, Texas, June 16-19, 1998. Mathematical sciences is the natural evolution of computer science and mathematics. Today, technological advances are leading the way to new mathematical frontiers—no wonder with sponsors like Bell Laboratories, the research division of Lucent Technologies. In fact, the conference organizers included William A. Massey of Bell Laboratories and Richard A. Tapia, Pamela J. Williams, Nathaniel Dean, Cassandra M. McZeal and Donald C. Williams, all of Rice University.

In addition to the invited talks and presentations, the conference offered contributed talks, tutorials, and a 'Meet the Sponsors' Night. The tutorials introduced senior researchers to advanced technological tools and computer scientists to mathematical concepts. At an evening reception, conference participants met representatives from the conference sponsors. The reception allowed members of the sponsoring organizations to distribute literature, as well as to answer questions about their organization's involvement in the support of research in the mathematical sciences. A lot of discussion was stimulated by the Keynote Address delivered at the Thursday evening banquet by Richard A. Tapia who is a Noah Harding Professor, Director of Education and Human Resources, and Associate Director of Minority Affairs at Rice University.

We thank the CRPC staff for their assistance in organizing and hosting the conference. Special thanks goes to Theresa Chatman, Outreach Coordinator, Office of the Vice Provost of Research and Graduate Studies, for her tireless efforts in making the conference a premiere event.

x PREFACE

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