CONTEMPORARY MATHEMATICS

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Probability on Algebraic Structures

AMS Special Session on Probability on Algebraic Structures March 12–13, 1999 Gainesville, Florida

Gregory Budzban
Philip Feinsilver
Arunava Mukherjea
Editors



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Preface

An AMS Special Session concerning Probability on Algebraic Structures was held in Gainesville, Florida on March 12–13, 1999 and attracted an international group of distinguished speakers. The breadth of this area of research was apparent from the variety of lectures presented. Results concerned probability on Lie groups and general locally compact groups. Generalizations of groups appeared in the form of hypergroups, abstract semigroups, and semigroups of matrices. Work on symmetric cones was contributed. There are a number of papers which report progress concerning constructing stochastic processes on quantum groups.

Several speakers presented expository talks on important topics, guided by their unique perspective of many years of investigation. Two expository papers, on hypergroups and quantum probability, are included in the volume, providing an avenue for non-specialists to begin to understand the problems involved in these areas. The rest of the papers present new results on a variety of topics. The techniques employed to investigate these topics are as wide ranging as the structures on which the processes live.

In addition to thanking the contributors to the volume, the editors are grateful to the Math departments at both the University of South Florida (USF) and Southern Illinois University Carbondale (SIUC) for their considerable assistance. In particular, Linda Gibson at SIUC and Denise Marks at USF were especially helpful during the editing and typesetting phases of this volume. The editors would also like to thank the Math department at USF for travel support for several of the participants of the conference and for hosting a special set of lectures in Tampa prior to the main conference in Gainesville. Finally, our thanks go to Christine Thivierge and the AMS publications office for their help in the final preparation of the volume.

Sincerely,

Greg Budzban Philip Feinsilver Arunava Mukherjea

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