CONTEMPORARY MATHEMATICS

791

Algebraic and Topological Aspects of Representation Theory

Virtual AMS Special Session
Geometric and Algebraic Aspects
of Quantum Groups and Related Topics
November 20–21, 2021

Mee Seong Im
Bach Nguyen
Arik Wilbert
Editors

AMS American Mathematical Society

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10 9 8 7 6 5 4 3 2 1 29 28 27 26 25 24

Contents

Preface vii

List of Participants ix

On the two-dimensional Jacobian conjecture: Magnus' formula revisited, III
Jacob Glidewell, William E. Hurst, Kyungyong Lee, and Li Li 1

Homotopy lifting maps on Hochschild cohomology and connections to deformation of algebras using reduction systems
Tolulope Oke 13

Centers and automorphisms of PI quantum matrix algebras
Jason Gaddis and Thomas Lamkin 41

On automorphisms of quantum Schubert cells
Garrett Johnson and Hayk Melikyan 63

On Wronskians and qq-systems
Anton M. Zeitlin 91

One-dimensional topological theories with defects: the linear case
Mee Seong Im and Mikhail Khovanov 105

A deformation of Robert-Wagner foam evaluation and link homology
Mikhail Khovanov and Nitu Kitchloo 147

Odd two-variable Soergel bimodules and Rouquier complexes
Mikhail Khovanov, Krzysztof Putyra, and Pedro Vaz 205

Preface

Noncommutative algebras and noncommutative algebraic geometry have been an active field of research for the past several decades, with many important applications in mathematical physics, representation theory, number theory, combinatorics, geometry, low-dimensional topology, and category theory. Our purpose for this special session is to bring together junior and established researchers on (noncommutative) algebras, especially quantum algebras, (noncommutative) algebraic geometry, low-dimensional topology, and related areas to celebrate and share their contributions in the area. The aim of this event is to initiate collaborations among the junior mathematicians and create connections to further advance their careers.

Many of our speakers were graduate students, postdocs, and junior faculty members from campuses in the southeastern region, such as University of Georgia, Georgia Southern University, Georgia Tech, University of South Alabama, University of Alabama, Louisiana State University, Tulane University, and University of Louisiana at Lafayette. To help accomplish this broader approach to integrating young researchers into the field, more than 70% of the invited speakers were graduate students and junior faculty members. Each of the sessions consisted of 4 to 5 early career speakers and one more established speaker. The goal has been to pair junior speakers with senior faculty speakers who have direct research overlap to help facilitate this collaboration.

Due to COVID-19, our special session was moved online, with the AMS moving quickly to build a platform to accommodate all the special sessions. When this change was announced in going from an in-person meeting to an online meeting, our speakers promptly, and without hesitation, agreed to give virtual talks. This was the beginning of an emergence of online conferences, colloquiums and seminars from 2020 to 2022.

All manuscripts in this Contemporary Mathematics volume contain original research, written by speakers and their collaborators in our special session. Many papers in this volume also discuss new concepts with detailed examples and current trends with novel and important results, all of which are invaluable contributions to the mathematics community.

Mee Seong Im
Bach Nguyen
Arik Wilbert

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789 **I. S. Krasil′shchik, A. B. Sossinsky, and A. M. Verbovetsky, Editors,** The Diverse World of PDEs, 2023

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