CONTEMPORARY MATHEMATICS

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Algebra and Coding Theory

Virtual Conference in Honor of Tariq Rizvi
Noncommutative Rings and their Applications VII
July 5–7, 2021
Université d'Artois, Lens, France
Virtual Conference
Quadratic Forms, Rings and Codes
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A. Leroy
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This volume is dedicated to Syed Tariq Rizvi for his outstanding contributions to Mathematics and in particular to Rings and Modules.

Courtesy of Professor André Leroy

Tariq Rizvi, Ohio State University, Lima, Ohio.

Contents

Preface ix

List of participants xi

A note on checkable codes over Frobenius and quasi-Frobenius rings
R. R. de Araujo, A. L. M. Pereira, and C. Polcino Milies 1

Good classical and quantum codes from multi-twisted codes
Nuh Aydin, Thomas Guidotti, and Peihan Liu 7

Evaluation of iterated Ore polynomials and skew Reed-Muller codes
Nabil Bennenni and André Leroy 23

Identities of the algebra $\mathbb{O} \otimes \mathbb{O}$
Guy Blachar, Louis H. Rowen, and Uzi Vishne 35

When Is Every Non Central-Unit A Sum of Two Nilpotents?
Simion Breaz and Yiqiang Zhou 47

Asymptotic Brauer p-dimension
Adam Chapman and Kelly McKinnie 57

Five theorems on Gorenstein global dimensions
Lars Winther Christensen, Sergio Estrada,
and Peder Thompson 67

Quasi-Self-Dual Codes over a Non-Unital Ring of Order 4
Steven T. Dougherty and Serap Şahinkaya 79

Codes from the Skew Ring $M_2(\mathbb{F}_2) \rtimes_\varphi G$
S. T. Dougherty, Serap Şahinkaya, and Deniz Ustun 89

The underlying vector spaces of certain endomorphism rings
Gabriella D'Este 107

Algebraic structures from the point of view of complete multiplicative lattices
Alberto Facchini 113

$\mathbb{Z}_2\mathbb{Z}_4$-additive codes as codes over rings
Cristina Fernández-Córdoba and Steve Szabo 133

On Utumi rings and continuous regular Baer rings
Gangyong Lee, Cosmin S. Roman, Nguyen Khanh Tung,
and Xiaoxiang Zhang 151

Matrices representable as product of conjugates of a singular matrix
S. K. Jain and André Leroy 163

Almost Projective Modules Over Non-Hereditary Algebras
Fatma Kaynarca, Gabriella D'Este,
and Derya Keskin Tütüncü 167

On prime ideals with generalized derivations in rings with involution
Mohammad Salahuddin Khan, Adnan Abbasi, Shakir Ali,
and Mohammed Ayedh 179

On nil algebras and a problem of Passman concerning nilpotent free algebras
Jan Krempa 197

Rings with transitive chaining of idempotents
Xavier Mary 205

On Continuous Hulls of Rings and Modules
Jae Keol Park and S. Tariq Rizvi 213

Preface

As an outgrowth of the two conferences "Noncommutative rings and their Application (NCRA)" and "Quadratic forms, rings and codes(QFRC)" held online in July 2021 in Lens (France), this volume contains a variety of topics in algebra and exhibits their interplay as presented in the meetings by the participants.

The NCRA conference was dedicated to our colleague Tariq Rizvi. Tariq Rizvi is a prolific algebraist and his impact on rings and modules is tremendous. His influence is really impressive and many algebraists around the world benefited from his experience, expertise and generosity. He is frank, humble, generous and it is always a pleasure to meet him with his welcoming smile. We are lucky and proud to count him as our friend and we are very happy to give him, through this volume, a small token of our respect and gratitude. Some of the papers included in the volume reflect the influence of his work on the questions related to the direct sums of continuous and quasi-continuous modules, among others.

One of the aims of these meetings was to establish connections between ring theory and coding theory. In particular, the applications to coding theory of Frobenius rings, the skew group rings and iterated Ore extensions are the subject of some of the papers. The questions on the classical topics, such as Utumi rings, Baer rings, nil and nilpotent algebras, Brauer groups are discussed in some papers. Other articles deal with questions that relate to the elementwise study for rings and modules. Lastly, this volume includes papers dealing with questions in homological algebra and lattice theory. All these works show the vivacity of the research in the area of noncommutative rings and its influence on other subjects.

As usual, the papers went through a strict refereeing process and we would like to use this opportunity to thank all the anonymous referees who kindly reviewed the papers.

We thank Christine Thivierge who was so helpful and efficient in handling this publication.

André Leroy and S.K. Jain

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The articles cover topics in commutative and noncommutative algebra and applications to coding theory. In some papers, applications of Frobenius rings, the skew group rings, and iterated Ore extensions to coding theory are discussed. Other papers discuss classical topics, such as Utumi rings, Baer rings, nil and nilpotent algebras, and Brauer groups. Still other articles are devoted to various aspects of the elementwise study for rings and modules. Lastly, this volume includes papers dealing with questions in homological algebra and lattice theory. The articles in this volume show the vivacity of the research of noncommutative rings and its influence on on other subjects.

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