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Nota di contenuto	Contents; Preface; References; Partial Correlations of Sequences and Their Applications S. Bozta and P. Udaya; 1. Introduction and Background; 1.1. Outline of Paper; 2. Sequences and Correlations; 3. Rings, Trace Functions and Sequences; 3.1. Galois Ring Preliminaries; 3.2. Sequence Families- A, Band C; 4. The Partial Correlation and Its First Moment; 5. The Second Moment of the Partial Correlation Function; 6. Conclusions and Discussion; Acknowledgements; References; On the Structure of Cyclic and Negacyclic Codes over Finite Chain Rings H. Q. Dinh, S. R. Lopez-Per-mouth and S. Szabo 1. Introduction 2. Chain Rings and Galois Rings; 3. Alternative Metrics for Codes over Finite Rings; 4. Constacyclic Codes over Arbitrary Commutative Finite Rings; 5. Simple-Root Cyclic and Negacyclic Codes over Finite Chain Rings; 6. Repeated-Root Cyclic and Negacyclic Codes over Finite Chain Rings; 7. Closing Remarks and A Few Generalizations; References; Linear Codes over Finite Chain Rings and Projective

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 2.4. Counting Formulas
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 6.1. A General Upper Bound for the Size of an Arc
 6.2. Constructions for Arcs; 6.3. $(k,2)$ -Arcs; 6.4. Dual Constructions; 6.5. Constructions Using Automorphisms; 6.6. Tables for Arcs in Geometries over Small Chain Rings; 7. Blocking Sets in Projective Hjelmslev Planes; 7.1. General Results; 7.2. Redei Type Blocking Sets; Acknowledgements; Bibliography; Foundations of Linear Codes Defined over Finite Modules: The Extension Theorem and the MacWilliams Identities 1. A. Wood; 1. Introduction; 2. Characters; 2.1. Basic results; 2.2. Additive form of characters; 2.3. Character modules
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 6.3. The strategy of Dinh and Lopez-Permouth and proofs of necessary conditions

Sommario/riassunto

This is the proceedings volume of the International Centre for Pure and Applied Mathematics Summer School course held in Ankara, Turkey, in August 2008. Contributors include Bozta?, Udaya, Dinh, Ling, Lopez-Permouth, Szabo, Honold, Landjev and Wood. The aim is to present a survey in fundamental areas and highlight some recent results.
