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Titolo Applied Linear Algebra, Probability and Statistics : A Volume in Honour

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Soggetti Algebras, Linear

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Stochastic processes

Game theory Linear Algebra Probability Theory

Statistical Theory and Methods

**Graph Theory** 

Stochastic Processes

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## Nota di contenuto

Chapter 1. On Some Matrix Versions of Covariance, Harmonic Mean and other Inequalities: An Overview -- Chapter 2. The Impact of Professor C. R. Rao's Research used in solving problems in Applied Probability --Chapter 3. Upper ounds for the Euclidean distances between the BLUEs under the partitioned linear fixed model and the corresponding mixed model -- Chapter 4. Nucleolus Computation for some Structured TU Games via Graph Theory and Linear Algebra -- Chapter 5. From Linear System of Equations to Artificial Intelligence - The evolution Journey of Computer Tomographic Image Reconstruction Algorithms -- Chapter 6. Shapley Value and other Axiomatic Extensions to Shapley Value --Chapter 7. An Accelerated Block Randomized Kaczmarz Methos --Chapter 8. Nullity of Graphs - A Survey and Some New Results --Chapter 9. Some Observations on Algebraic Connectivity of Graphs --Chapter 10. Orthogonality for iadjoints f Operators -- Chapter 11. Permissible covariance structures for simultaneous retention of BLUEs in small and big linear models -- Chapter 12. On some Special Matrices and its Applications in Linear Complementarity Problem -- Chapter 3. On Nearest Matrix with Partially Specified Eigen Structure -- Chapter 14. Equality of BLUEs for Full, Small, and Intermediate Linear Models under Covariance Change, with links to Data Confidentiality and Encryption.-Chapter 15. Statistical Inference for Middle Censored Data with Applications. etc.

## Sommario/riassunto

This book focuses on research in linear algebra, statistics, matrices, graphs and their applications. Many chapters in the book feature new findings due to applications of matrix and graph methods. The book also discusses rediscoveries of the subject by using new methods. Dedicated to Prof. Calyampudi Radhakrishna Rao (C.R. Rao) who has completed 100 years of legendary life and continues to inspire us all and Prof. Arbind K. Lal who has sadly departed us too early, it has contributions from collaborators, students, colleagues and admirers of Professors Rao and Lal. With many chapters on generalized inverses, matrix analysis, matrices and graphs, applied probability and statistics, and the history of ancient mathematics, this book offers a diverse array of mathematical results, techniques and applications. The book promises to be especially rewarding for readers with an interest in the focus areas of applied linear algebra, probability and statistics.