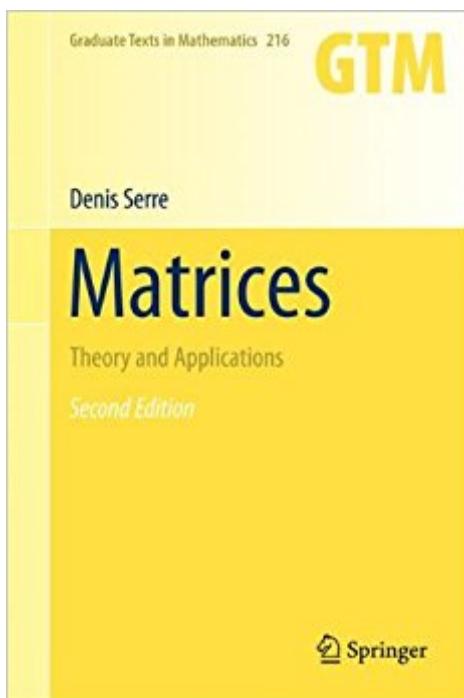


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Matrices: Theory And Applications (Graduate Texts In Mathematics)



Synopsis

In this book, Denis Serre begins by providing a clean and concise introduction to the basic theory of matrices. He then goes on to give many interesting applications of matrices to different aspects of mathematics and also other areas of science and engineering. With forty percent new material, this second edition is significantly different from the first edition. Newly added topics include: \diamond Dunford decomposition, \diamond tensor and exterior calculus, polynomial identities, \diamond regularity of eigenvalues for complex matrices, \diamond functional calculus and the Dunfordâ Taylor formula, \diamond numerical range, \diamond Weyl's and von Neumannâ TMs inequalities, and \diamond Jacobi method with random choice. The book mixes together algebra, analysis, complexity theory and numerical analysis. As such, this book will provide many scientists, not just mathematicians, with a useful and reliable reference. It is intended for advanced undergraduate and graduate students with either applied or theoretical goals. This book is based on a course given by the author at the \mathbb{A} cole Normale Sup \mathbb{A} rieure de Lyon.

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