1. Record Nr. UNIBAS000016280

Autore	Lindsey, James K.
Titolo	The analysis of categorical data using GLIM / James K. Lindsey
Pubbl/distr/stampa	New York [etc.] : Springer, c1989
ISBN	0-387-97029-0
Descrizione fisica	V, 168 p. ; 25 cm.
Collana	Lecture notes in statistics ; 56
Disciplina	519.2
Soggetti	Statistica
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910409998303321

Autore	Balakrishnan V
Titolo	Mathematical Physics : Applications and Problems / / by V. Balakrishnan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-39680-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (790 pages)
Disciplina	530.15
Soggetti	Physics Mathematical physics Engineering mathematics Mathematical Methods in Physics Mathematical Physics Engineering Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	Chapter 1: Warming up: Functions of a real variable -- Chapter 2: Gaussian integrals, Stirling's formula, and some integrals -- Chapter 3: Some more functions -- Chapter 4: Generalized functions -- Chapter 5: Vectors and tensors -- Chapter 6: Vector calculus -- Chapter 7: A bit of fluid dynamics -- Chapter 8: Some more vector calculus -- Chapter 9: A bit of electromagnetism and special relativity -- Chapter 10: Linear vector spaces -- Chapter 11: A look at matrices -- Chapter 12: More about matrices -- Chapter 13: Infinite-dimensional vector spaces -- Chapter 14: Linear operators on a vector space -- Chapter 15: Operator algebras and identities -- Chapter 16: Orthogonal polynomials -- Chapter 17: Fourier series -- Chapter 18: Fourier integrals -- Chapter 19: Discrete probability distributions -- Chapter 20: Continuous probability distributions -- Chapter 21: Stochastic processes -- Chapter 22: Analytic functions of a complex variable -- Chapter 23: More on analytic functions -- Chapter 24: Linear response and analyticity -- Chapter 25: Analytic continuation and the gamma function -- Chapter 26: Multivalued functions and integral representations -- Chapter 27: Mobius transformations -- Chapter 28: Laplace transforms -- Chapter 29: Green function for the Laplacian operator -- Chapter 30: The diffusion equation -- Chapter 31: The wave equation -- Chapter 32: Integral equations.
Sommario/riassunto	This textbook is aimed at advanced undergraduate and graduate students interested in learning the fundamental mathematical concepts and tools widely used in different areas of physics. The author draws on a vast teaching experience, and presents a comprehensive and self-contained text which explains how mathematics intertwines with and forms an integral part of physics in numerous instances. Rather than emphasizing rigorous proofs of theorems, specific examples and physical applications (such as fluid dynamics, electromagnetism, quantum mechanics, etc.) are invoked to illustrate and elaborate upon the relevant mathematical techniques. The early chapters of the book introduce different types of functions, vectors and tensors, vector calculus, and matrices. In the subsequent chapters, more advanced topics like linear spaces, operator algebras, special functions, probability distributions, stochastic processes, analytic functions, Fourier series and integrals, Laplace transforms, Green's functions and integral equations are discussed. The book also features about 400 exercises and solved problems interspersed throughout the text at appropriate junctures, to facilitate the logical flow and to test the key concepts. Overall this book will be a valuable resource for a wide spectrum of students and instructors of mathematical physics. .