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Altri autori (Persone)	Adhikari
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Nota di contenuto	Chapter 1: Laboratory Gravitational Waves: Sources and Detection -- Chapter 2: Color Theory: Basic Color Models 10.0 Basic Music Theory5.0 - Harmonics -- Chapter 3: Possible Extension of Linguistics, Semiology, and Geometric Lie Algebra Foundation of Atomic Structure and Periodic System to Superconductivity -- Chapter 4: Color Theory: Basic Color Models 12.0 Basic Music Theory 7.0 - Basic Time Hypothesis -- Chapter 5: Original Lie Algebra Behind Real Structure, Models, and Interactive Computer System of Chemical Elements, Compounds, and Compositions -- Chapter 6: Secret Sharing Schemes for General Access Structures with Leakage Resilience -- Chapter 7: Approximation of Functions in Generalized Hölder Space by Means of Picard Singular Integral -- Chapter 8: Numerical Analysis on the Transport Process of Heat and Mass on MHD Nanofluid Flow Including Chemical Reaction and the Slip Effects at the Boundary of a Stretching Surface -- Chapter 9: Fibonacci Generation of Exact Distribution of Fibonacci Summands -- Chapter 10: Riemann Integral of Set-Valued

Functions on Time Scales -- Chapter 11: Real Projective Space with Topological Surgery Theory -- Chapter 12: Fixed Point Analysis of a Homogeneous Isotropic Turbulent Flow -- Chapter 13: Symmetric and Asymmetric Axial and Directional Models and Bivariate Extensions Thereof -- Chapter 14: Classification and Regression Error Bounds for Inhomogeneous Data with Applications to Wireless Networks -- Chapter 15: Probabilistic Bounds for Data Storage with Feature Selection and Undersampling.

Sommario/riassunto

This book contains select chapters presented at the 17th & 18th International Conference of the Institute of Mathematics, Bioinformatics, Information Technology and Computer Science (IMBIC) on Mathematical Sciences for Advancement of Science and Technology (MSAST 2023 & 2024), held at Salt Lake, Kolkata, West Bengal, India, from 21 to 23 December 2023 & 2024. Contributed by researchers from the USA, Russia, Norway, Sweden, Nigeria, and India, it discusses recent research in the intersection of mathematics with various disciplines such as physics, computer science, statistics, and engineering. It focuses research on interdisciplinary topics such as the mathematical principles of color theory and music theory to cutting-edge applications in cybersecurity, superconductivity, and fluid dynamics. The book studies how to solve complex problems and proposes innovative solutions by applying mathematical tools like Lie algebra, set-valued functions, and topological surgery theory. This interdisciplinary approach fosters deeper understanding of phenomena like leakage resilience in secret sharing schemes, the structure of the periodic table, and the behavior of nanofluids.
