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Nota di contenuto	Parametrized and Trigonometric generated quantitative convergence of smooth Picard singular integral operators, -- Nonlinear incidence induced bifurcation in a COVID-19 dynamical model with vaccination in terms of recovery, -- Quantum Sensing via Superconducting Qubit Control, -- Stagnation and cycles in Marx's Circuit of Capital, -- Integrating Sparse Principal Component Analysis in High-Dimensional Partially Linear Models: A Local Polynomial Approach, -- Estimates for modified-Kantorovich Bernstein type rational Operators based on weighted convergence, -- Numerical Solution of Nonlinear Differential System for Non-Newtonian Fluid Model by Using Prediction Application of Artificial Intelligence, -- Polynomial coding theory to detect and

correct errors in any codewords, -- Modeling and numerical simulation of a class of Reaction-diffusion system resulting chemicals Kinetic, -- Two-parametric families of orbits produced by three-dimensional separable potentials inside a material concentration.

Sommario/riassunto

This book is a compilation of select chapter from the 2023 International Conference on Nonlinear Science and Complexity. It presents recent advancements, discoveries, and ongoing research in various facets of nonlinear science and complexity. The book covers a broad scope of topics, including nonlinear dynamical systems, complex systems, quantum sensing, and mathematical approaches in biological and economic models. Key subspecialties addressed include nonlinear differential equations, modeling of nonlinear processes in diverse fields such as biology and economics, and innovative computational techniques. Each chapter contributes unique insights into its respective field, providing theoretical analyses, practical applications, and numerical simulations to advance the understanding of complex nonlinear phenomena.