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Nota di contenuto	Comparative Study of Some Wavelet Based Numerical Methods to Solve Initial Values Problems -- Effects on MHD and Thermal Radiation on Unsteady Free Convective Flow of a Hybrid Nanofluid Past a Vertical Plate -- Rayleigh Streaming Past A Wavy Wall with no Slip Suction Under a Transverse Magnetic Field -- Non-Darcian Gravitactic Bioconvection with a Porous Saturated Vertical Vibration -- Impact of Two-Temperature on a Generalized Thermoelastic Plate with Thermal Loading -- Numerical Investigation of Baffle Spacing in a Shell and Tube Heat Exchanger with Segmental Baffle -- New Analytical Exact Solutions of time-fractional (2+1)-dimensional Calogero-Bogoyavlenskii-Schiff (CBS) Equations -- Nonlinear Convective Flow of Power-law Fluid Over an Inclined Plate with Double Dispersion Effects and Convective Thermal Boundary Condition -- Micropolar Fluid Flow Over a Frustum of Cone Subjected to Convective Boundary Condition: Darcy-Forchheimer Model -- Convergence and Comparison Theorems for Three-step Alternating Iteration Method for Rectangular Linear System -- Thermal Hydraulic Performance of Helical Baffle Shell and

Sommario/riassunto

This book is a compendium of the proceedings of the International Conference on Applied Analysis, Computation, and Mathematical Modelling in Engineering (AACMME-2021). The book covers a variety of applications such as mechanical, acoustical, physical, electrical, bio-mathematical, and computational fluid dynamics. Since mathematical modeling necessitates a wide range of skills and methods, the book concentrates on techniques that will be of specific interest to engineers, scientists, and those who work with discrete and continuous systems models. This book guides students, researchers, and professionals through the new approaches, the powerful tools for quickly mastering the most popular mathematical and computational models used in engineering and science. These new approaches enable readers to not only systematically create effective models, but also extend these models to any macroscopic physical structure.

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