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Nota di contenuto	Ali Aral and Tuncer Acar: On Approximation Properties of Generalized Durrmeyer Operators -- Atma Sahu and S. Chakravarty: Regression Based Neural Network Simulation for Vibration Frequencies of the Rotating Blade -- D. K. Verma and Vijay Gupta: Approximation by a new sequence of operators involving Charlier Polynomials with a certain parameter -- Dae San Kim and Taekyun Kim: Identities of Symmetry for the Generalized Degenerate Euler Polynomials -- David Feller, Fairouz Kamareddine and Lavinia Burski: Using MathLang to Check the Correctness of Speci cations in Object-Z -- Dharmendra Kumar and

Sachin Kumar: Ultimate Numerical Bound Estimation of Chaotic Dynamical Finance Model -- Gajendra Pratap Singh and Sangita Kansal: Basic Results on Crisp Boolean Petri Nets -- Galina Filipuk: The roperties of Multiple Orthogonal Polynomials with Mathematica -- Georgy A. Omel'yanov: The problem of soliton collision for non-integrable equations -- H. Begehr: Explicit solutions of the Poisson equation in plane domains -- Irene Azzali, Giulia Marcaccio, Rosanna Turrisi and Ezio Venturino: A genetically istinguishable competition model -- Johannes Israel, Andreas Fischer and John Martinovic: Discrete and Phase-Only Receive Beamforming -- Joshua L. Padgett and Qin Sheng: On the stability of a variable step exponential splitting method for solving multidimensional quenching-combustion equations -- Michael M. Resch: Perspectives in High Performance Computing -- Naokant Deoa and Neha Bhardwaj: Direct and Inverse Theorems for Beta Durrmeyer Operators -- Pramila Joshi: Big Data Gets Cloudy : Challenges and opportunities -- Prashant Kumar, Gulshan Batra and Kwang Ik Kim: A Moored Ship Motion Analysis in Realistic Pohang New Harbor and Modified PNH -- Qin Sheng: The legacy of ADI and LOD methods and an operator splitting algorithm for solving highly oscillatory wave problems -- R. G. Vyas: Generalized absolute convergence of trigonometric Fourier series -- Sourav Das and A. Swaminathan: Some new inequalities for the ratio of gamma functions -- Tanweer Jalal: Some new I-lacunary generalized di erence sequence spaces in n-normed space -- Tony W. H. Sheu: GPU-accelerated simulation of Maxwell's equations -- Vinai K. Singh and A. K.Singh: A Collocation Method for Integral Equations in Terms of Generalized Bernstein Polynomials -- Vijay Gupta and V. K. Singh: Convergence estimates in simultaneous approximation for certain generalized Baskakov operators -- Yulia Pronina: Mechanochemical Corrosion: Modelling and Analytical Benchmarks for Initial Boundary Value Problems with Unknown Boundaries.

Sommario/riassunto

The book discusses important results in modern mathematical models and high performance computing, such as applied operations research, simulation of operations, statistical modeling and applications, invisibility regions and regular meta-materials, unmanned vehicles, modern radar techniques/SAR imaging, satellite remote sensing, coding, and robotic systems. Furthermore, it is valuable as a reference work and as a basis for further study and research. All contributing authors are respected academicians, scientists and researchers from around the globe. All the papers were presented at the international conference on Modern Mathematical Methods and High Performance Computing in Science & Technology (M3HPCST 2015), held at Raj Kumar Goel Institute of Technology, Ghaziabad, India, from 27–29 December 2015, and peer-reviewed by international experts. The conference provided an exceptional platform for leading researchers, academicians, developers, engineers and technocrats from a broad range of disciplines to meet and discuss state-of-the-art mathematical methods and high performance computing in science & technology solutions. This has brought new prospects for collaboration across disciplines and ideas that facilitate novel breakthroughs. .