

1. Record Nr.	UNISA996418198803316
Titolo	Applications of mathematics and informatics in natural sciences and engineering : aminse 2019, tbilisi, georgia, september 23-26 // edited by George Jaiani, David Natroshvili
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] ©2020
ISBN	3-030-56356-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (VIII, 280 p. 41 illus., 38 illus. in color.)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1009 ; ; 334
Disciplina	949.207
Soggetti	Logic, Symbolic and mathematical Differential equations, Partial
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	G. Avalishvili and M. Avalishvili, On Variational Methods of Investigation of Mathematical Problems for Thermoelastic Piezoelectric Solids -- P. K. Babilua and E. A. Nadaraya, On Nonparametric Kernel-Type Estimate of the Bernoulli Regression Function -- L. Beznea, M. Deaconu and O. Lupascu-Stamate, Scaling Property for Fragmentation Processes Related to Avalanches -- T. Chilachava and G. Pochkhua, Conict Resolution Models and Resource Minimization Problems -- T. Davitashvili, I. Samkharadze and M. Sharikadze, Modeling of Extreme Events and Regional Climate Variability on the Territory of the Caucasus (Georgia) -- B. Dundua, T. Kutsia, M. Marin and C. Pau, Extending the pLog Calculus with Proximity Relations -- B. Dundua, T. Kutsia, M. Marin and M. Rukhaia, Specication and Analysis of ABAC Policies in a Rule-Based Framework -- N. Ene, M. Fernández and B. Pinaud, A Strategic Graph Rewriting Model of Rational Negligence in Financial Markets -- A. Fialowski, On Lie Algebras with an Invariant Inner Product -- R. Galdava, D. Gulua and J. Rogava, Study of Three-Layer Semi-Discrete Schemes for Second Order Evolution Equations by Chebyshev Polynomials -- G. Giorgobiani, V. Kvaratskhelia and V. Tarieladze, Notes On Sub-Gaussian Random Elements -- S. Gorgisheli, M. Mrevlishvili and D. Natroshvili, Localized Boundary-Domain Integro-Differential Equations Approach for stationary Heat Transfer Equation

-- B. Gulua and R. Janjgava, Boundary Value Problems of the Plane Theory of Elasticity for Materials with Voids -- O. Purtukhia and Z. Zerakidze, Objective and Subjective Consistent Criteria for Hypotheses Testing -- W. Rickert and W. H. Müller, Review of Rational Electrodynamics: Deformation and Force Models for Polarizable and Magnetizable Matter.

---

#### Sommario/riassunto

This book presents peer-reviewed papers from the 4th International Conference on Applications of Mathematics and Informatics in Natural Sciences and Engineering (AMINSE2019), held in Tbilisi, Georgia, in September 2019. Written by leading researchers from Austria, France, Germany, Georgia, Hungary, Romania, South Korea and the UK, the book discusses important aspects of mathematics, and informatics, and their applications in natural sciences and engineering. It particularly focuses on Lie algebras and applications, strategic graph rewriting, interactive modeling frameworks, rule-based frameworks, elastic composites, piezoelectrics, electromagnetic force models, limiting distribution, degenerate Ito-SDEs, induced operators, subgaussian random elements, transmission problems, pseudo-differential equations, and degenerate partial differential equations. Featuring theoretical, practical and numerical contributions, the book will appeal to scientists from various disciplines interested in applications of mathematics and informatics in natural sciences and engineering. .

---