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-- 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. .