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Autore	Hounkonnou Mahouton Norbert
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Altri autori (Persone)	MitroviMelanija AbbasMujahid KhanMadad
Disciplina	512.48
Soggetti	Proof theory Nonassociative rings Algebra, Homological Topological groups Lie groups Differential equations Proof Theory and Constructive Mathematics Non-associative Rings and Algebras Category Theory, Homological Algebra Topological Groups and Lie Groups Differential Equations
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Nota di contenuto	Quandles, knots, quandle rings and graphs (Elhamdadi) -- New splittings of operations of Poisson algebras and transposed Poisson algebras and related algebraic structures (Bai) -- Some varieties of loops (Bol-Moufang and non-Bol-Moufang types) (Sòlárin) -- The 3-graded extension of the Poincaré algebra (Kerner) -- Ternary Leibniz color algebras and beyond (Bakayoko) -- (Hom-)(co)associative

ternary (co)algebras and infinitesimal ternary (hom-)bialgebras (Hounkonnou) -- Elduque-Myung type mutations of Hom-algebras (Silvestrov) -- (Hom-) -generalizedWitt algebras (Hounkonnou) -- Some algebraic properties of representations of polynomial covariance commutation relations (Silvestrov) -- Applications of Quasigroups in Cryptography and Coding Theory (Trpcheska) -- Generalized quadratic quasigroup functional equations (Krapež) -- A Primer on Noncommutative Classical Dynamics on Velocity Phase Space and Souriau Formalism (Guha).

Sommario/riassunto

This book gathers invited, peer-reviewed works presented at the 2021 edition of the Classical and Constructive Nonassociative Algebraic Structures: Foundations and Applications—CaCNAS: FA 2021, virtually held from June 30 to July 2, 2021, in dedication to the memory of Professor Nebojša Stevanovi (1962-2009). The papers cover new trends in the field, focusing on the growing development of applications in other disciplines. These aspects interplay in the same cadence, promoting interactions between theory and applications, and between nonassociative algebraic structures and various fields in pure and applied mathematics. In this volume, the reader will find novel studies on topics such as left almost algebras, logical algebras, groupoids and their generalizations, algebraic geometry and its relations with quiver algebras, enumerative combinatorics, representation theory, fuzzy logic and foundation theory, fuzzy algebraic structures, group amalgams, computer-aided development and transformation of the theory of nonassociative algebraic structures, and applications within natural sciences and engineering. Researchers and graduate students in algebraic structures and their applications can hugely benefit from this book, which can also interest any researcher exploring multi-disciplinarity and complexity in the scientific realm.
