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Titolo	Developments in Functional Equations and Related Topics [[electronic resource] /] / edited by Janusz Brzdk, Krzysztof Ciepliski, Themistocles M. Rassias
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ISBN	3-319-61732-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (354 pages)
Collana	Springer Optimization and Its Applications, , 1931-6828 ; ; 124
Disciplina	515.75
Soggetti	Difference equations Functional equations Approximation theory Geometry, Differential Functional analysis Probabilities Difference and Functional Equations Approximations and Expansions Differential Geometry Functional Analysis Probability Theory and Stochastic Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. The behavior of the difference between two means (Shoshana Abramovich) -- 2. Isometric approximation in bounded sets and its applications (Pekka Alestalo) -- 3.On the indicator plurality function (. 25in; font-size: 10pt; line-height: 115%; font-family: NimbusRomNo9L-Regu;">Anna Bahyrycz) -- 4.The translation equation in the ring of formal power series over C and formal functional equations (Harald Fripertinger and Ludwig Reich) -- 5. Fischer-Muszély additivity – a half century story (Roman Ger) -- 6.Alien functional equations – a selective survey of results (Roman Ger and Maciej Sablik) -- 7.Remarks on analogies between Haar meager sets and Haar null sets (Eliza Jaboska) -- 8.On some inequalities inspired by the stability

of dynamical system (Zenon Moszner) -- 9. Homomorphisms from Functional Equations in Probability (Adam J. Ostaszewski) -- 10.Recent developments in the translation equation and its stability (Barbara Przebieracz) -- 11.On some recent applications of stochastic c onvex ordering theorems to some functional inequalities for convex functions – a survey (Teresa Rajba) -- 12.On the construction of the field of reals by means of functional equations and their stability and related topics (Jens Schwaiger) -- 13.Generalized Dhombres functional equation (Jaroslav Smítal and Marta Štefánková) -- 14.Functional equations and stability problems on hypergroups (László Székelyhidi) -- 15.Stability of systems of general functional equations in the compact-open topology (Pavol Zlatoš).

Sommario/riassunto

This book presents current research on Ulam stability for functional equations and inequalities. Contributions from renowned scientists emphasize fundamental and new results, methods and techniques. Detailed examples are given to theories to further understanding at the graduate level for students in mathematics, physics, and engineering. Key topics covered in this book include: Quasi means Approximate isometries Functional equations in hypergroups Stability of functional equations Fischer-Muszély equation Haar meager sets and Haar null sets Dynamical systems Functional equations in probability theory Stochastic convex ordering Dhombres functional equation Nonstandard analysis and Ulam stability This book is dedicated in memory of Stanisaw Marcin Ulam, who posed the fundamental problem concerning approximate homomorphisms of groups in 1940; which has provided the stimulus for studies in the stability of functional equations and inequalities.