

1. Record Nr.	UNINA9910299969903321
Titolo	Recent Advances in Delay Differential and Difference Equations // edited by Ferenc Hartung, Mihály Pituk
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-08251-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (271 p.)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1017 ; ; 94
Disciplina	515.625
Soggetti	Difference equations Functional equations Approximation theory Dynamical systems Difference and Functional Equations Approximations and Expansions Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	On Necessary and Sufficient Conditions for Preserving Convergence Rates to Equilibrium in Deterministically and Stochastically Perturbed Differential Equations with Regularly Varying Nonlinearity -- Comparison Theorems for Second Order Functional Differential Equations -- Analysis of Qualitative Dynamic Properties of Positive Polynomial Systems using Transformations -- Almost Oscillatory Solutions of Second Order Difference Equations of Neutral Type -- Uniform Weak Disconjugacy and Principal Solutions for Linear Hamiltonian Systems -- Stability Criteria for Delay Differential Equations -- Analyticity of Solutions of a Differential Equation with a Threshold Delay -- Application of Advanced Integro-Differential Equations in Insurance Mathematics and Process Engineering -- Stability and Control of Systems with Propagation -- Discrete Itô Formula for Delay Stochastic Difference Equations with Multiple Noises -- On Semilinear Hyperbolic Functional Equations -- A Fast Parallel Algorithm for Delay Partial Differential Equations Modeling the Cell

Sommario/riassunto

Delay differential and difference equations serve as models for a range of processes in biology, physics, engineering, and control theory. In this volume, the participants of the International Conference on Delay Differential and Difference Equations and Applications, Balatonfüred, Hungary, July 15-19, 2013 present recent research in this quickly-evolving field. The papers relate to the existence, asymptotic, and oscillatory properties of the solutions; stability theory; numerical approximations; and applications to real world phenomena using deterministic and stochastic discrete and continuous dynamical systems.
