1. Record Nr. UNINA9910786026803321

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Titolo	The Laplace transform [[electronic resource] /] / Richard E. Bellman, Robert S. Roth
Pubbl/distr/stampa	Singapore, : World Scientific, c1984
ISBN	1-283-97137-2 981-4415-15-4
Descrizione fisica	1 online resource (175 p.)
Collana	Series in modern applied mathematics ; ; v. 3
Altri autori (Persone)	RothRobert <1930->
Disciplina	515.723 515/.723
Soggetti	Laplace transformation Transformations (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	PREFACE; CONTENTS; Chapter 1 THE LAPLACE TRANSFORM; 1.1 Introduction; 1.2 Functions of a Bounded Variation; 1.3 The Stieltjes Integral; 1.4 Improper Stieltjes Integral; 1.5 The Laplace Transform; 1.6 Existence and Convergence; 1.7 Properties of the Laplace Transform; 1.8 The Inversion of the Laplace Transform; 1.9 The Convolution Theorem; 1.10 Instability of the Inverse of the Laplace Transform; 1.11 The Laplace Transform and Differential Equations; 1.12 Transient Solutions; 1.13 Generating Functions; Problems; Chapter 2 ORDINARY DIFFERENTIAL EQUATIONS; 2.1 Introduction 2.2 Linear Differential Equations With Constant Coefficients2.3 The Laplace Transform Solution; 2.4 Systems of Linear Differential Equations; 2.5 Mismatched Solutions; 2.6 Behavior Of The Higher Derivatives; 2.7 An Example; Problems; Chapter 3 DIFFERENTIAL-DIFFERENCE EQUATIONS; 3.1 Introduction; 3.2 Examples; 3.3 Types of Differential-Difference Equations; 3.4 Existence and Uniqueness; 3.5 Exponential Solutions; 3.6 Laplace-Transform Solutions; 3.7 Order Of Growth Of Solutions; 3.8 The Characteristic Roots; 3.9 Asymptotic Behavior of the Solution; 3.10 The Shift Theorem 3.11 Equations of the Neutral and Advanced Types3.12 Linear Systems Of Differential-Difference Equations; 3.13 A Limiting Case For Differential-Difference Equations; Problems; Chapter 4 PARTIAL

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5.6 Some Important Results5.7 Systems of Renewal Equations; 5.8 Branching Processes; Problems; Chapter 6 NUMERICAL INVERSION OF THE LAPLACE TRANSFORM; 6.1 Introduction; 6.2 The Complex Laplace Transform; 6.3 Numerical Quadrature; 6.4 The Legendre Polynomials; 6.5 Numerical Inversion of the Laplace Transform; 6.6 Explicit Inversion Formula; 6.7 Instability of the Inverse of the Laplace Transform; 6.8 Tychonov Regularization; 6.9 Obtaining the Initial Approximation; 6.10 Change of the Time Scale; Problems; SUBJECT INDEX

Sommario/riassunto

The classical theory of the Laplace Transform can open many new avenues when viewed from a modern, semi-classical point of view. In this book, the author re-examines the Laplace Transform and presents a study of many of the applications to differential equations, differential-difference equations and the renewal equation.