1. Record Nr. UNINA9910704170403321 Autore Lucchitta Baerbel K. Titolo Multispectral Landsat images of Antarctica / / by Baerbel K. Lucchitta [and four others] Pubbl/distr/stampa [Reston, Va.]:,: Department of the Interior, U.S. Geological Survey,, 1987 Washington:,: United States Government Printing Office Descrizione fisica 1 online resource (iii, 21 pages): illustrations (some color) Collana U.S. Geological Survey bulletin; ; 1696 Soggetti Earth sciences - Antarctica Geological mapping - Antarctica Landsat satellites Earth sciences Geological mapping Photographs from space Antarctica Photographs from space Antarctica Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from title screen (viewed Aug. 11, 2014).

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8 Linear Second-order Differential Equations with variable Coefficients9 The Method of Frobenius; 10 Variation of Parameters; 11 The Sturm-Liouville Differential Equation; Problems; References; Chapter 3 Linear Algebraic Equations, Determinants, and Matrices; 1 Introduction; 2 Simple Determinants; 3 Fundamental Definitions; 4 Laplace Expansion; 5 Fundamental Properties of Determinants; 6 The Evaluation of Numerical Determinants; 7 Definition of a Matrix; 8 Special Matrices; 9 Equality of Matrices; Addition and Subtraction; 10 Multiplication of Matrices; 11 Matrix Division, the Inverse Matrix 12 The Reversal Law in Transposed and Reciprocated Products13 Properties of Diagonal and Unit Matrices; 14 Matrices Partitioned into Submatrices; 15 Matrices of Special Types; 16 The Solution of Linear Algebraic Equations; 17 The Special Case of n Equations and n Unknowns; 18 Systems of Homogeneous Linear Equations; 19 The Characteristic Matrix and the Characteristic Equation of a Matrix; 20 Eigenvalues and the Reduction of a Matrix to Diagonal Form; 21 The Trace of a Matrix; 22 The Cayley-Hamilton Theorem; 23 The Inversion of Large Matrices: 24 Sylvester's Theorem 25 Power Series of Matrices Functions of Matrices; 26 Alternate Method of Evaluating Functions of Matrices; 27 Differentiation and Integration of Matrices; 28 Association of Matrices with Linear Differential Equations; 29 Method of Peano-Baker; 30 Adjoint Method; 31 Existence and Uniqueness of Solutions of Matrix Differential Equations; 32 Linear Equations with Periodic Coefficients; 33 Matrix Solution of the Hill-Meissner Equation; 34 The Use of Matrices to Determine the Roots of Algebraic Equations; Problems; References; Chapter 4 Laplace Transforms: 1 Introduction 2 The Fourier-Mellin Theorem

## Sommario/riassunto

One of the most widely used reference books on applied mathematics for a generation, distributed in multiple languages throughout the world, this text is geared toward use with a one-year advanced course in applied mathematics for engineering students. The treatment assumes a solid background in the theory of complex variables and a familiarity with complex numbers, but it includes a brief review. Chapters are as self-contained as possible, offering instructors flexibility in designing their own courses. The first eight chapters explore the analysis of lumped parameter systems. Succeeding topi