

1. Record Nr.	UNINA9910151937903321
Autore	Kunkel Peter
Titolo	Differential-Algebraic Equations [[electronic resource] ] : Analysis and Numerical Solution // Peter Kunkel, Volker Mehrmann
Pubbl/distr/stampa	Zuerich, Switzerland, : European Mathematical Society Publishing House, 2006 Zurich, Switzerland : , : European Mathematical Society, , [2006]
ISBN	3037195177
Descrizione fisica	1 online resource (385 pages)
Collana	EMS Textbooks in Mathematics (ETB)
Classificazione	34-xx65-xx
Soggetti	Differential-algebraic equations Boundary value problems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 359-371) and index.
Nota di contenuto	; 1. Introduction -- ; 2. Linear differential-algebraic equations with constant coefficients -- ; 3. Linear differential-algebraic equations with variable coefficients -- ; 4. Nonlinear differential-algebraic equations -- ; 5. Numerical methods for strangeness-free problems -- ; 6. Numerical methods for index reduction -- ; 7. Boundary value problems -- ; 8. Software for the numerical solution of differential-algebraic equations.
Sommario/riassunto	Differential-algebraic equations are a widely accepted tool for the modeling and simulation of constrained dynamical systems in numerous applications, such as mechanical multibody systems, electrical circuit simulation, chemical engineering, control theory, fluid dynamics and many others. This is the first comprehensive textbook that provides a systematic and detailed analysis of initial and boundary value problems for differential-algebraic equations. The analysis is developed from the theory of linear constant coefficient systems via linear variable coefficient systems to general nonlinear systems. Further sections on control problems, generalized inverses of differential-algebraic operators, generalized solutions, and differential equations on manifolds complement the theoretical treatment of initial value problems. Two major classes of numerical methods for differential-algebraic equations (Runge--Kutta and BDF methods) are discussed

and analyzed with respect to convergence and order. A chapter is devoted to index reduction methods that allow the numerical treatment of general differential-algebraic equations. The analysis and numerical solution of boundary value problems for differential-algebraic equations is presented, including multiple shooting and collocation methods. A survey of current software packages for differential-algebraic equations completes the text. The book is addressed to graduate students and researchers in mathematics, engineering and sciences, as well as practitioners in industry. A prerequisite is a standard course on the numerical solution of ordinary differential equations. Numerous examples and exercises make the book suitable as a course textbook or for self-study.

2. Record Nr.	UNINA9910963012203321
Autore	Walraven Gijsbertus Engelinus Laurentius <1957->
Titolo	Health and poverty : global health problems and solutions // Gijs Walraven
Pubbl/distr/stampa	London ; ; Washington, DC, : Earthscan, 2011
ISBN	1-280-87304-3 9786613714350 1-136-53740-6 1-136-53739-2 1-84977-568-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (209 p.)
Disciplina	362.1086942
Soggetti	Poverty - Health aspects Health services accessibility Equality - Health aspects World health
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	Health and Poverty: Global Health Problems and Solutions; Copyright; Contents; List of Figures, Tables and Boxes; Foreword;

Acknowledgements; 1 The poor have no face, no voice; 2 Roll back malaria; 3 TB and HIV; 4 Safe motherhood; 5 Family planning; 6 Cervical cancer; 7 Water and sanitation; 8 Neglected tropical diseases; 9 Undernutrition; 10 New diseases of poverty; 11 Health financing; 12 Cross-border health care; 13 Revisiting Alma Ata; Glossary; Index

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Sommario/riassunto

There is growing interest and concern about the unacceptable differentials in health between and within countries. This comes out of the realization that poor people will only be able to prosper, and emerge from poverty, if they enjoy better health. Healthy populations are a precondition for sustainable development. Using a novel combination of the personal studies of patients and description of conditions or diseases, this book provides a highly original and accessible introduction to key issues in global health today. Especially during the past decade, global health initiatives have become a

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