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   Nota di contenuto   1 The Flexibility of DAE Formulations (Stephen L. Campbell) --
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                       Methods for Linear Differential-Algebraic Equations (Peter Benner,
                       Philip Losse, Volker Mehrmann and Matthias Voigt) -- 4 Boundary Value
                       Problems for Differential-Algebraic Equations (René Lamour, Roswitha
                       März and Ewa Weinmüller).

   Sommario/riassunto The present volume comprises survey articles on various fields of
                       Differential-Algebraic Equations (DAEs), which have widespread
                       applications in controlled dynamical systems, especially in mechanical
                       and electrical engineering and a strong relation to (ordinary) differential
                       equations. The individual chapters provide reviews, presentations of
                       the current state of research and new concepts in - Flexibility of DAE
                       formulations - Reachability analysis and deterministic global
                       optimization - Numerical linear algebra methods - Boundary value
                       problems The results are presented in an accessible style, making this
                       book suitable not only for active researchers but also for graduate

students (with a good knowledge of the basic principles of DAEs) for self-study.