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                        H.A. Schilders

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   Nota di contenuto   Introduction -- Dierential-Algebraic Equations -- Decoupling of linear
                        constant DAEs -- Index-aware model order reduction -- Large scale
                        problems -- Conclusion.

   Sommario/riassunto   The main aim of this book is to discuss model order reduction (MOR)
                        methods for differential-algebraic equations (DAEs) with linear
                        coefficients that make use of splitting techniques before applying
                        model order reduction. The splitting produces a system of ordinary
                        differential equations (ODE) and a system of algebraic equations, which
                        are then reduced separately. For the reduction of the ODE system,
                        conventional MOR methods can be used, whereas for the reduction of
                        the algebraic systems new methods are discussed. The discussion
                        focuses on the index-aware model order reduction method (IMOR) and
                        its variations, methods for which the so-called index of the original
                        model is automatically preserved after reduction.