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Sommario/riassunto	Exact Finite-Difference Schemes is a first overview of the topic also describing the state-of-the-art in this field of numerical analysis. Construction of exact difference schemes for various parabolic and elliptic partial differential equations are discussed, including vibrations and transport problems. After this, applications are discussed, such as the discretisation of ODEs and PDEs and numerical methods for

stochastic differential equations. Contents:Basic notationPreliminary resultsHyperbolic equationsParabolic equationsUse of exact difference schemes to construct NSFD discretizations of differential equationsExact and truncated difference schemes for boundary-value problemExact difference schemes for stochastic differential equationsNumerical blow-up timeBibliography