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Sommario/riassunto

This book provides an introduction to the valuation of financial instruments on equity markets. Written from the perspective of trading, risk management and quantitative research functions and written by a practitioner with many years' experience in markets and in academia, it provides a valuable learning tool for students and new entrants to these markets. Coverage includes: Trading and sources of risk, including credit and counterparty risk, market and model risks, settlement and Herstatt risks. Numerical methods including discrete-time methods, finite different methods, binomial models and Monte Carlo simulations. ·Probability theory and stochastic processes from the financial modeling perspective, including probability spaces, sigma algebras, measures and filtrations. ·Continuous time models such as Black-Scholes-Merton; Delta-hedging and Delta-Gamma-hedging; general diffusion models and how to solve Partial Differential Equation using the Feynmann-Kac representation. ·The trading, structuring and hedging several kinds of exotic options, including: Binary/Digital options; Barrier options; Lookbacks; Asian options; Chooses; Forward options; Ratchets; Compounded options; Basket options; Exchange and Currency-linked options; Pay later options and Quantos. ·A detailed explanation of how to construct synthetic instruments and strategies for different market conditions, discussing more than 30 different option strategies. With source code for many of the models featured in the book provided and extensive examples and illustrations throughout, this book provides a comprehensive introduction to this topic and will prove an invaluable learning tool and reference for anyone studying or working in this field. .