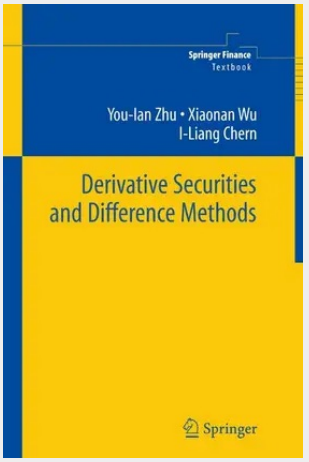
Zhu / Wu / Chern

Derivative Securities and Difference Methods



This book studies pricing financial derivatives with a partial differential equation approach. The treatment is mathematically rigorous and covers a variety of topics in finance including forward and futures contracts, the Black-Scholes model, European and American type options, free boundary problems, lookback options, interest rate models, interest rate derivatives, swaps, caps, floors, and collars. Each chapter concludes with exercises.

This book is devoted to determining the prices of financial derivatives using a partial differential equation approach. In the first part the authors describe the formulation of the problems (including related free-boundary problems) and derive the closed form solutions if they have been found. The second part discusses how to obtain their numerical solutions efficiently for both European-style and American-style derivatives and for both stock options and interest rate derivatives. The numerical methods discussed are finite-difference methods. The book also discusses how to determine the coefficients in the partial differential equations. The aim of the book is to provide readers who have some code writing experience for engineering computations with the skills to develop efficient derivative-pricing codes. The book includes exercises throughout and will appeal to students and researchers in quantitative finance as well as practitioners in the financial industry and code developers.

117,69 €
109,99 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780387208428
Medium: Buch
ISBN: 978-0-387-20842-8
Verlag: Springer
Erscheinungstermin: 28.09.2004
Sprache(n): Englisch
Auflage: 1. Auflage 2004
Serie: Springer Finance
Produktform: Gebunden
Gewicht: 924 g
Seiten: 518
Format (B x H): 155 x 235 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)