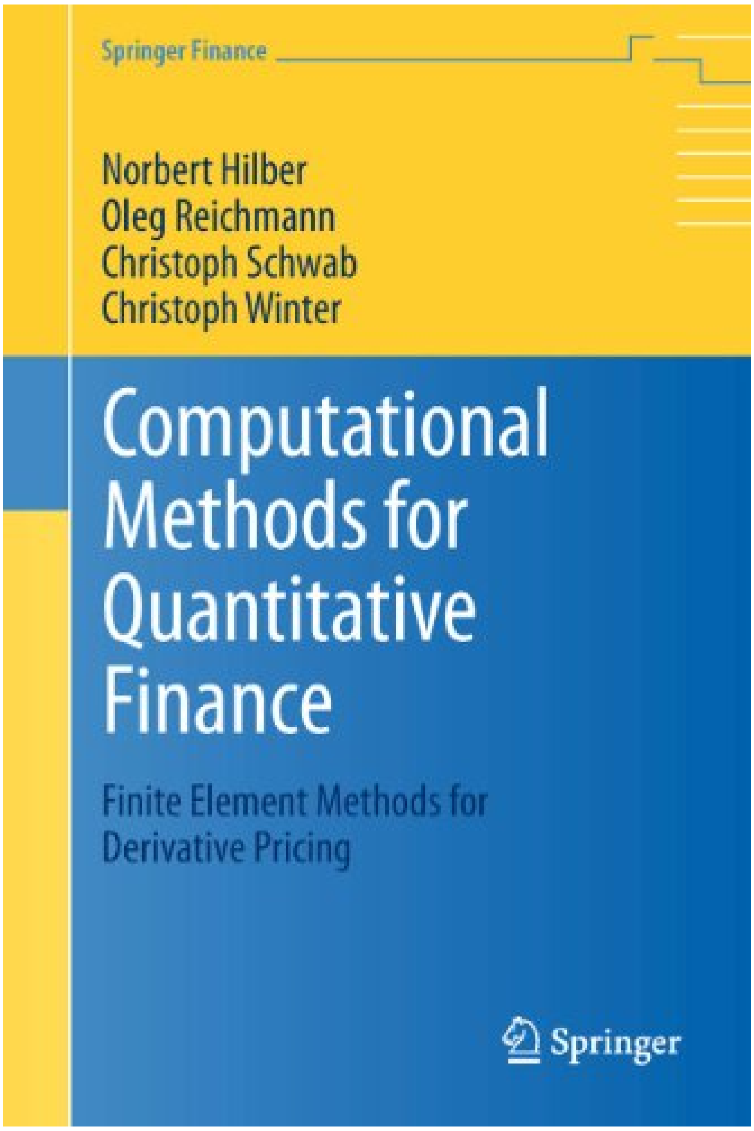
Computational Methods for Quantitative Finance: Finite Element Methods for Derivative Pricing (Springer Finance)

Norbert Hilber, Oleg Reichmann, Christoph Schwab, Christoph Winter



Norbert Hilber, Oleg Reichmann, Christoph Schwab, Christoph Winter : Computational Methods for Quantitative Finance: Finite Element Methods for Derivative Pricing (Springer Finance) before purchasing it in order to gage whether or not it would be worth my time, and all praised Computational Methods for Quantitative Finance: Finite Element Methods for Derivative Pricing (Springer Finance):

Many mathematical assumptions on which classical derivative pricing methods are based have come under scrutiny in recent years. The present volume offers an introduction to deterministic algorithms for the fast and accurate pricing of derivative contracts in modern finance. This unified, non-Monte-Carlo computational pricing methodology is capable of handling rather general classes of stochastic market models with jumps, including, in particular, all currently used Leacute;vy and stochastic volatility models. It allows us e.g. to quantify model risk in computed prices on plain vanilla, as well as on various types of exotic contracts. The algorithms are developed in classical Black-Scholes markets, and then extended to market models based on multiscale stochastic volatility, to Leacute;vy, additive and certain classes of Feller processes.nbsp;This book is intended for graduate students and researchers, as well as for practitioners in the fields of quantitative finance and applied and computational mathematics with a solid background in mathematics, statistics or economics.?