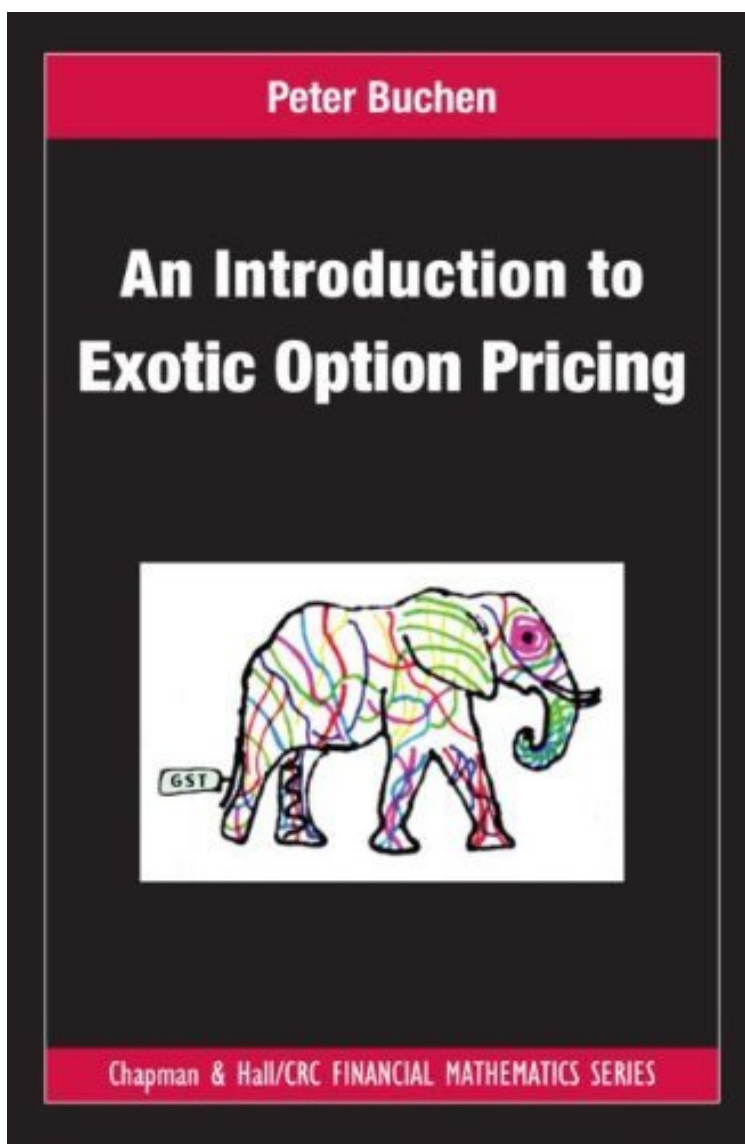


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Peter Buchen

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Peter Buchen : An Introduction to Exotic Option Pricing (Chapman and Hall/CRC Financial Mathematics Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised An Introduction to Exotic Option Pricing (Chapman and Hall/CRC Financial Mathematics Series):

In an easy-to-understand, nontechnical yet mathematically elegant manner, *An Introduction to Exotic Option Pricing* shows how to price exotic options, including complex ones, without performing complicated integrations or formally solving partial differential equations (PDEs). The author incorporates much of his own unpublished work, including ideas and techniques new to the general quantitative finance community. The first part of the text presents the necessary financial, mathematical, and statistical background, covering both standard and specialized topics. Using no-arbitrage concepts, the Black-Scholes model, and the fundamental theorem of asset pricing, the author develops such specialized methods as the principle of static replication, the Gaussian shift theorem, and the method of images. A key feature is the application of the Gaussian shift theorem and its multivariate extension to price exotic options without needing a single integration. The second part focuses on applications to exotic option pricing, including dual-expiry, multi-asset rainbow, barrier, lookback, and Asian options. Pushing Black-Scholes option pricing to its limits, the author introduces a powerful formula for pricing a class of multi-asset, multiperiod derivatives. He gives full details of the calculations involved in pricing all of the exotic options. Taking an applied mathematics approach, this book illustrates how to use straightforward techniques to price a wide range of exotic options within the Black-Scholes framework. These methods can even be used as control variates in a Monte Carlo simulation of a stochastic volatility model.

"... an excellent guide to modern financial modelling. ... The author promises that you can 'price exotic options without needing a single integration' and keeps the promise. ... The author's background in teaching makes this book easy to read." —Osmo Jauri, *International Statistical*, 2014 "The book presents an entertaining and captivating course in option pricing, aiming to derive closed form analytical formulas for the prices of exotic options in an elegant way, provided such a formula exists. Thanks to the machinery developed by the author and his work group, pricing formulas for even the most complex exotic options are obtained from elementary pricing formulas using elegant arguments and simple algebraic manipulations, i.e. without lengthy integrations. ... a very valuable treatise on exotic option pricing in a Black-Scholes economy. In addition, every chapter concludes with a set of highly relevant and inspiring exercises." —Tamas Maatrai, *Zentralblatt MATH* 1242
About the Author Peter Buchen is an Associate Professor of Finance at the University of Sydney Business School. Dr. Buchen is co-founder of the Sydney Financial Mathematics Workshop, has authored many publications in financial mathematics, and has taught courses in quantitative finance and derivative securities. His research focuses on mathematical methods for valuing exotic options.