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Nota di contenuto	Frontmatter -- Contents -- Preface -- Part 1. Foundations -- Chapter One. The Single Period Binomial Model / Musiela, Marek / Zariphopoulou, Thaleia -- Chapter Two. Utility Indifference Pricing: An Overview / Henderson, Vicky / Hobson, David -- Part 2. Diffusion Models -- Chapter Three. Pricing, Hedging, And Designing Derivatives With Risk Measures / Barrieu, Pauline / Karoui, Nicole El -- Chapter Four. From Markovian To Partially Observable Models / Carmona, René -- Part 3. Applications -- Chapter Five. Portfolio Optimization / Ilhan, Aytac / Jonsson, Mattias / Sircar, Ronnie -- Chapter Six. Indifference Pricing Of Defaultable Claims / Bielecki, Tomasz R. / Jeanblanc, Monique -- Chapter Seven. Applications To Weather Derivatives And Energy Contracts / Carmona, René -- Part 4. Complements -- Chapter Eight. BSDEs And Applications / Karoui, Nicole El / Hamadène, Said / Matoussi, Anis -- Chapter Nine. Duality Methods / Elliott, Robert J. / Hoek, John van der -- Bibliography -- Contributors -- Notation Index -- Author Index -- Subject Index
Sommario/riassunto	This is the first book about the emerging field of utility indifference pricing for valuing derivatives in incomplete markets. René Carmona

brings together a who's who of leading experts in the field to provide the definitive introduction for students, scholars, and researchers. Until recently, financial mathematicians and engineers developed pricing and hedging procedures that assumed complete markets. But markets are generally incomplete, and it may be impossible to hedge against all sources of randomness. Indifference Pricing offers cutting-edge procedures developed under more realistic market assumptions. The book begins by introducing the concept of indifference pricing in the simplest possible models of discrete time and finite state spaces where duality theory can be exploited readily. It moves into a more technical discussion of utility indifference pricing for diffusion models, and then addresses problems of optimal design of derivatives by extending the indifference pricing paradigm beyond the realm of utility functions into the realm of dynamic risk measures. Focus then turns to the applications, including portfolio optimization, the pricing of defaultable securities, and weather and commodity derivatives. The book features original mathematical results and an extensive bibliography and indexes. In addition to the editor, the contributors are Pauline Barrieu, Tomasz R. Bielecki, Nicole El Karoui, Robert J. Elliott, Said Hamadène, Vicky Henderson, David Hobson, Aytac Ilhan, Monique Jeanblanc, Mattias Jonsson, Anis Matoussi, Marek Musiela, Ronnie Sircar, John van der Hoek, and Thaleia Zariphopoulou. The first book on utility indifference pricing Explains the fundamentals of indifference pricing, from simple models to the most technical ones Goes beyond utility functions to analyze optimal risk transfer and the theory of dynamic risk measures Covers non-Markovian and partially observed models and applications to portfolio optimization, defaultable securities, static and quadratic hedging, weather derivatives, and commodities Includes extensive bibliography and indexes Provides essential reading for PhD students, researchers, and professionals