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Titolo	Modelling Extremal Events [[electronic resource] ] : for Insurance and Finance // by Paul Embrechts, Claudia Klüppelberg, Thomas Mikosch
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ISBN	3-642-33483-0
Edizione	[Corr. 4. print.]
Descrizione fisica	1 online resource (XV, 648 p.)
Collana	Stochastic Modelling and Applied Probability, , 0172-4568 ; ; 33
Disciplina	650/.01/513
Soggetti	Actuarial science Business mathematics Econometrics Economics, Mathematical Probabilities Finance Actuarial Sciences Business Mathematics Quantitative Finance Probability Theory and Stochastic Processes Finance, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"With 100 Figures."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Reader Guidelines -- Risk Theory -- Fluctuations of Sums -- Fluctuations of Maxima -- Fluctuations of Upper Order Statistics -- An Approach to Extremes via Point Processes -- Statistical Methods for Extremal Events -- Time Series Analysis for Heavy-Tailed Processes -- Special Topics.
Sommario/riassunto	Both in insurance and in finance applications, questions involving extremal events (such as large insurance claims, large fluctuations, in financial data, stock-market shocks, risk management, ...) play an increasingly important role. This much awaited book presents a comprehensive development of extreme value methodology for random walk models, time series, certain types of continuous-time stochastic

processes and compound Poisson processes, all models which standardly occur in applications in insurance mathematics and mathematical finance. Both probabilistic and statistical methods are discussed in detail, with such topics as ruin theory for large claim models, fluctuation theory of sums and extremes of iid sequences, extremes in time series models, point process methods, statistical estimation of tail probabilities. Besides summarising and bringing together known results, the book also features topics that appear for the first time in textbook form, including the theory of subexponential distributions and the spectral theory of heavy-tailed time series. A typical chapter will introduce the new methodology in a rather intuitive (though always mathematically correct) way, stressing the understanding of new techniques rather than following the usual "theorem-proof" format. Many examples, mainly from applications in insurance and finance, help to convey the usefulness of the new material. A final chapter on more extensive applications and/or related fields broadens the scope further. The book can serve either as a text for a graduate course on stochastics, insurance or mathematical finance, or as a basic reference source. Its reference quality is enhanced by a very extensive bibliography, annotated by various comments sections making the book broadly and easily accessible.

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