1. Record Nr. UNISA996418273703316 Autore Kulik Rafal Titolo Heavy-Tailed Time Series [[electronic resource] /] / by Rafal Kulik, Philippe Soulier New York, NY:,: Springer New York:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 1-0716-0737-5 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XIX, 681 p. 7 illus., 5 illus. in color.) Collana Springer Series in Operations Research and Financial Engineering, 1431-8598 519.24 Disciplina Soggetti **Probabilities** Statistics Applied mathematics **Engineering mathematics** Probability Theory and Stochastic Processes Statistical Theory and Methods Applications of Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Regular variation -- Regularly varying random variables -- Regularly varying random vectors -- Dealing with extremal independence --Regular variation of series and random sums -- Regularly varying time series -- Limit theorems -- Convergence of clusters-. Point process convergence -- Convergence to stable and extremal processes -- The tall empirical and quantile processes -- Estimation of cluster

series -- Limit theorems -- Convergence of clusters-. Point process convergence -- Convergence to stable and extremal processes -- The tall empirical and quantile processes -- Estimation of cluster functionals -- Estimation for extremally independent time series -- Bootstrap -- Time series models -- Max-stable processes -- Markov chains -- Moving averages -- Long memory processes -- Appendices. .

Sommario/riassunto

This book aims to present a comprehensive, self-contained, and

concise overview of extreme value theory for time series, incorporating the latest research trends alongside classical methodology. Appropriate for graduate coursework or professional reference, the book requires a background in extreme value theory for i.i.d. data and basics of time series. Following a brief review of foundational concepts, it progresses linearly through topics in limit theorems and time series models while

including historical insights at each chapter's conclusion. Additionally, the book incorporates complete proofs and exercises with solutions as well as substantive reference lists and appendices, featuring a novel commentary on the theory of vague convergence.