1. Record Nr. UNINA9910309664603321 Autore **Hofert Marius** Titolo Elements of Copula Modeling with R [[electronic resource] /] / by Marius Hofert, Ivan Kojadinovic, Martin Mächler, Jun Yan Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-89635-0 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (274 pages) Collana Use R!, , 2197-5736 Disciplina 519.535 Soggetti Statistics Economics. Mathematical Applied mathematics **Engineering mathematics** Computer software R (Computer program language) Statistics for Business, Management, Economics, Finance, Insurance Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Statistics and Computing/Statistics Programs Quantitative Finance Mathematical and Computational Engineering Mathematical Software Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Preface -- Introduction -- Copulas -- Classes and Families --Nota di contenuto Estimation -- Graphical Diagnostics, Tests and Model Selection -- Ties, Time Series and Regression -- R and Package Versions -- References -- Index. Sommario/riassunto This book introduces the main theoretical findings related to copulas and shows how statistical modeling of multivariate continuous distributions using copulas can be carried out in the R statistical environment with the package copula (among others). Copulas are

multivariate distribution functions with standard uniform univariate

margins. They are increasingly applied to modeling dependence among random variables in fields such as risk management, actuarial science, insurance, finance, engineering, hydrology, climatology, and meteorology, to name a few. In the spirit of the Use R! series, each chapter combines key theoretical definitions or results with illustrations in R. Aimed at statisticians, actuaries, risk managers, engineers and environmental scientists wanting to learn about the theory and practice of copula modeling using R without an overwhelming amount of mathematics, the book can also be used for teaching a course on copula modeling.