

1. Record Nr.	UNINA9910254274903321
Autore	Akahira Masafumi
Titolo	Statistical Estimation for Truncated Exponential Families // by Masafumi Akahira
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-5296-4
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XI, 122 p. 10 illus.)
Collana	JSS Research Series in Statistics, , 2364-0065
Disciplina	519.544
Soggetti	Statistics Mathematical statistics - Data processing Statistical Theory and Methods Statistics and Computing Statistics in Business, Management, Economics, Finance, Insurance Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Sommario/riassunto	This book presents new findings on nonregular statistical estimation. Unlike other books on this topic, its major emphasis is on helping readers understand the meaning and implications of both regularity and irregularity through a certain family of distributions. In particular, it focuses on a truncated exponential family of distributions with a natural parameter and truncation parameter as a typical nonregular family. This focus includes the (truncated) Pareto distribution, which is widely used in various fields such as finance, physics, hydrology, geology, astronomy, and other disciplines. The family is essential in that it links both regular and nonregular distributions, as it becomes a regular exponential family if the truncation parameter is known. The emphasis is on presenting new results on the maximum likelihood estimation of a natural parameter or truncation parameter if one of them is a nuisance parameter. In order to obtain more information on the truncation, the Bayesian approach is also considered. Further, the

application to some useful truncated distributions is discussed. The illustrated clarification of the nonregular structure provides researchers and practitioners with a solid basis for further research and applications.
