

FOREWORD

Modern methods of statistics of extremes have been widely applied in risk modeling, with more and more scientists concerned with extrapolating to the tails of a distribution, often beyond any existing data. Complex estimation and inference problems arise when assessing the probability of such rare events, and ingenious statistical methods have been developed based on various assumptions useful for extrapolation.

This special issue of *Revstat—Statistical Journal* presents an overview of such methods, by discussing recent developments in the statistical modeling of extremes and their applications to the analysis of risk. It covers a variety of topics, from methods for scalar extremes, often applied in a discrete time setting, to the infinite-dimensional setting, thus far mostly applied in the space domain. This special issue aims to provide a broad view of such topics, integrating modern advances with the historical perspective. This allows the authors to go to the origins of the concepts, methods and models of extremes, but in the light of the current state of the art. *A Collection of Surveys on Tail Event Modeling* tries, however, to offer more, as some challenges for future work are pinpointed by the authors. We hope these papers stimulate interaction between experts in the field of extremes and that they are useful for those entering this important field.

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