IMS Lecture Notes–Monograph Series **Volume 18**

Selected Proceedings of the Sheffield Symposium on Applied Probability

edited by
I. V. Basawa & R. L. Taylor

Proceedings of the Symposium on Applied Probability, Sheffield, August 1989. The purpose of the Sheffield Symposium on Applied Probability was to focus attention on some of the prominent directions in applied probability. This volume contains several major papers covering models in epidemiology, genetics, random fields, branching processes, random walks, directed polymers and evolution time-scales. The reader will find a broad array of interesting problems discussed in the eighteen technical articles included in this volume.

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Stochastic Orders and Decision Under Risk

edited by
K. Mosler & M. Scarsini

A selection of papers presented at the International Workshop on Stochastic Orders and Decision Under Risk, Hamburg, May 1989. The aim of this workshop was to contribute to the theory and applications of stochastic orders and to gather scientists from different disciplines who are using similar mathematical tools in their fields. The workshop gathered individuals from probability theory, statistics, reliability, queueing, economics, finance, insurance, and mathematical physics. The twenty-three papers in this volume represent a selection of those presented in Hamburg.

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An empirical process that assigns possible different non-random (random) weights to different observations is called a *weighted (randomly weighted) empirical process.* These processes are as basic to linear regression and autoregression models as the ordinary process is to one sample models. However, their usefulness in studying linear regression and autoregression models has not been fully exploited. This monograph addresses this question to a large extent.

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