## 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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## Weighted Empiricals and Linear Models

by Hira L. Koul

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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