ROYAL STATISTICAL SOCIETY LECTURE NOTE SERIES • 4

Stochastic Networks Theory and Applications

Edited by
F. P. KELLY
S. ZACHARY
and I. ZIEDINS



OXFORD SCIENCE PUBLICATIONS

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Stochastic networks: theory and applications Edited by F. P. Kelly, S. Zachary, and I. Ziedins

The theory of stochastic networks is a significant and rapidly developing research area, driven in part by important industrial applications in the design and control of modern communications and manufacturing networks. This volume is a collection of invited papers written by some of the leading researchers in this field, and provides a comprehensive survey of current research and the very latest developments.

The areas covered include: the mathematical modelling and the optimal control of queuing and loss networks; the use of large deviations theory and effective bandwidth concepts in analysis and control; the statistical modelling and analysis of network data.

The book also contains a comprehensive and up-to-date bibliography of the statistical literature on long-range dependence and self-similarity in network traffic and other scientific and engineering applications.

