

CONTENTS

Foreword	xi
Preface	xiii
Optimality of "full bang to reduce predicted miss" for some partially observed stochastic control problems	
V.E. Benes, R.W. Rishel	1
On some approximation techniques in non-linear filtering	
A. Bensoussan	17
Applications of Homogenization Theory to the control of flexible structures	
Gilmer L. Blankenship	33
Control of Markov chains with long-run average cost criterion	
Vivek S. Borkar	57
Automatic study in stochastic control	
J.P. Chancelier, C. Gomez, J.P. Quadrat, A. Sulem	79
Some results on Kolmogoroff equations for infinite dimensional stochastic systems	
G. Da Prato	87
Hamilton-Jacobi equations with constraints	
I. Capuzzo-Dolcetta	99
An approximate minimum principle for a partially observed Markov chain	
Robert J. Elliott	107
Generalized solutions in the optimal control of diffusions	
Wendell H. Fleming and Domokos Vermes	119
Consistency of maximum likelihood and pseudo-likelihood estimators for Gibbs Distributions	
B. Gidas	129

Brownian models of queueing networks with heterogeneous customer populations	
J. Michael Harrison	147
Non-linear filtering - the degenerate case	
U.G. Haussmann	187
The asymptotic behaviour of the maximum likelihood estimates for a class of diffusion processes	
Kurt Helmes	205
The filtering problem for infinite dimensional stochastic processes	
G. Kallianpur and R.L. Karandikar	215
Stochastic control under finite-fuel constraints	
Ioannis Karatzas	225
Recent advances in the theory of stochastic adaptive control	
P.R. Kumar	241
Almost optimal controls for wideband noise driven systems	
Harold J. Kushner	255
Asymptotic solutions of bandit problems	
T.L. Lai	275
Viscosity solutions of second-order equations, stochastic control and stochastic differential games	
P.-L. Lions and P.E. Souganidis	293
On the memory length of the optimal nonlinear filter	
E. Mayer-Wolf, M. Zakai and O. Zeitouni	311
Implementation issues for Markov decision processes	
Armand M. Makowski and Adam Shwartz	323
Navigating and stopping multi-parameter bandit processes	
Avi Mandelbaum	339
Bounded variation control of a damped linear oscillator under random disturbances	
Jose-Luis Menaldi	373
The support of the law of a filter in C^∞ topology	
M. Chaleyat-Maurel and D. Michel	395
Existence of densities for statistics in the cubic sensor problem	
Daniel Ocone	409
Piecewise linear filtering	
E. Pardoux and C. Savona	429
Quick simulation of excessive backlogs in networks of queues	
Shyam Parekh and Jean Walrand	439

On some perturbation problems in optimal stopping and impulse control Maurice Robin	473
Optimal control of jump-markov processes and viscosity solutions Halil Mete Soner	501
An introduction to singular stochastic control Steven E. Shreve	513
Scheduling, routing, and flow control in stochastic networks Shaler Stidham, Jr.	529
Product expansions of exponential Lie Series and the discretization of stochastic differential equations H.J. Sussmann	563
A survey of large time asymptotics of simulated annealing algorithms John N. Tsitsiklis	583
Stochastic scheduling on parallel processors and minimization of concave functions of completion times Richard R. Weber	601