

CONTENTS

PREFACE

Page xiii

Part 1

LIMIT THEOREMS RELATED TO THE INVARIANCE PRINCIPLE

METHODS OF A COMMON PROBABILITY SPACE FOR MARKOV PROCESSES

I.S. Borisov

Page 3

ON THE ASYMPTOTICS OF DISTRIBUTIONS CONNECTED WITH THE EXIT OF A NON-DISCRETE RANDOM WALK FROM AN INTERVAL

V.I. Lotov

Page 29

LARGE DEVIATIONS OF THE WIENER PROCESS

A.A. Mogul'skij

Page 41

THE RATE OF CONVERGENCE IN BOUNDARY VALUE PROBLEMS FOR DOMAINS WITH DISCONTINUITIES

I.F. Pinelis

Page 86

ON ESTIMATES OF THE RATE OF CONVERGENCE IN THE INVARIANCE PRINCIPLE

A.I. Sakhanenko

Page 124

CONTENTS

Part 2

LIMIT THEOREMS FOR RANDOM PROCESSES AND THEIR APPLICATIONS

ON ASYMPTOTICALLY OPTIMAL TESTS FOR TESTING COMPLEX CLOSE HYPOTHESES

A.A. Borovkov and A.I. Sakhanenko

Page 139

ON MODERATELY LARGE DEVIATIONS FROM THE INVARIANT MEASURE

A.A. Mogul'skij

Page 163

A LOCAL THEOREM FOR BELLMAN-HARRIS CRITICAL PROCESSES WITH DISCRETE TIME

V.A. Topchij

Page 175

THE ESTIMATES OF THE RATE OF CONVERGENCE IN A LOCAL LIMIT THEOREM FOR THE SQUARE OF THE NORM IN ℓ_2

V.I. Chebotarev

Page 219

HOMOGENIZATION OF NON-DIVERGENT RANDOM ELLIPTIC OPERATORS

V.V. Yurinskij

Page 225

Part 3

PROPERTIES OF DISTRIBUTIONS AND APPLIED PROBLEMS

ON THE DISTRIBUTION OF THE SUPREMUM OF A RANDOM WALK ON A MARKOV CHAIN

K. Arndt

Page 253

ON A PROBLEM OF MARTINGALES ON A PLANE

V.M. Borodikhin

Page 267

QUADRATIC VARIATION OF RANDOM SEQUENCES

G.P. Karev

Page 286

PROBABILITY INEQUALITIES
FOR SUMS OF INDEPENDENT RANDOM VARIABLES
WITH VALUES IN A BANACH SPACE

S.V. Nagaev

Page 292

INDUCTIVE LIMITS OF DIRECTED SYSTEMS
OF CONTINUOUS MEASURES

G.V. Nedogibchenko and L.Ya. Savel'ev

Page 308

AN ESTIMATE FOR DENSITY OF THE DISTRIBUTION
OF THE INTEGRAL TYPE

A.I. Sakhanenko

Page 335

QUEUES WITH CUSTOMERS OF SEVERAL TYPES

S.G. Foss

Page 348