

# CONTENTS

Preface	(vi)
List of Symbols	(viii)
<b>0. BY WAY OF INTRODUCTION</b>	<b>1</b>
A. Homogeneous isotropic diffusion	1
B. Chemical reaction	6
C. Superposition of diffusion and reaction	9
D. Superposition of semigroups	13
E. Comments on the Feynman integral	20
F. Stieltjes integral	23
G. A general outline of the approach	24
<b>1. PRELIMINARIES, NOTATION, CONVENTIONS</b>	<b>29</b>
A. Summation of sequences	29
B. Continuous linear maps	31
C. Tensor products	34
D. Families of sets and functions	37
E. Additive set functions	40
F. Countably additive set functions	43
G. Young functions	47
<b>2. INTEGRATING GAUGES</b>	<b>50</b>
A. Integrable functions	51
B. Negligible sets and functions	54
C. Spaces of integrable functions	56
D. Integrating gauges	57
E. Daniell integrals	61
F. Constructions of integrating gauges	64
G. Vector lattices	66
H. Direct sums of integrating gauges	69
J. Very sub-additive regular gauges	71
K. Functions of integrating gauges	73