

Contents

Editor's Preface to the English Edition	vii
Introduction	ix
Chapter 1. Characteristic Functionals of Probability Distributions on Spaces of Numerical Sequences	1
Introduction	1
1.1. The space R^N : Basic Properties	2
1.2. Probability Distributions on the Space R^N	6
1.3. Probability Distributions on Subspaces of the Space R^N	12
1.4. Characteristic Functionals of Distributions on Subspaces of the Space R^N	18
Chapter 2. Gaussian Distributions on Spaces of Numerical Sequences	21
Introduction	21
2.1. The Definition and Basic Properties of Gaussian Distributions: Gaussian Distributions on the Space R^N	22
2.2. Gaussian Distributions on the Spaces l_p ($1 \leq p < \infty$)	28
2.3. Gaussian Distributions on the Spaces l_p ($1 \leq p < \infty$): Continuation	36
2.4. Gaussian Distributions on the Spaces c_0 and l_∞	46
Chapter 3. Distributions on Hilbert Space	51
Introduction	51
3.1. Some General Problems	53

3.2. The Estimation of the Convergence Rate in the Central Limit Theorem	63
3.3. Some Other Problems	73
Chapter 4. Some Basic Problems of the Theory of Probability Distributions on Banach Spaces	85
Introduction	85
4.1. Introductory Remarks: Fourier Analysis in Banach Spaces	86
4.2. The Pettis Integral and the Expectation of Random Elements	93
4.3. Operators Mapping Spaces into Their Conjugates and the Covariance of Random Elements	100
4.4. The Characterization of Classes of Covariance Operators	107
References	116
Author Index	119
Subject Index	121