

Contents

FOREWORD	v	
PREFACE	vii	
LECTURE 1	The Random Function of Time and Phase	1
LECTURE 2	Homogeneous Polynomial Functionals and Their Averages	16
LECTURE 3	Orthogonal Functions	28
LECTURE 4	Orthogonal Functions and Autocorrelation Functions	39
LECTURE 5	Application to Frequency-Modulation Problems—I	49
LECTURE 6	Application to Frequency-Modulation Problems—II	56
LECTURE 7	Application to Frequency-Modulation Problems—III	63
LECTURE 8	Application to the Study of Brain Waves, Random Time, and Coupled Oscillators	67
LECTURE 9	Some Thoughts on Quantum Theory	78
LECTURE 10	Nonlinear Systems—I	88
LECTURE 11	Nonlinear Systems—II	97
LECTURE 12	Coding	101
LECTURE 13	Decoding	110
LECTURE 14	A New Approach to Statistical Mechanics—I	118
LECTURE 15	A New Approach to Statistical Mechanics—II	123
INDEX	129	