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Descrizione fisica	1 online resource (XX, 559 p. 2 illus., 1 illus. in color.)
Disciplina	515.7
Soggetti	Functional analysis Probabilities Operator theory Mathematical analysis Functional Analysis Probability Theory Operator Theory Integral Transforms and Operational Calculus
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Rademacher functions in $L_p$ -spaces -- The Rademacher system in symmetric spaces situated "far" from $L_\infty$ -- The Rademacher system in symmetric spaces situated "close" to $L_\infty$ -- Rademacher sums with vector coefficients -- Best constants in the Khintchine and Kahane-Khintchine inequalities -- The Rademacher chaos in symmetric spaces -- The comparison of systems of random variables -- The extraction of lacunary subsystems -- Extreme properties of the Rademacher system -- Bernoulli processes -- Rademacher multiplier spaces -- Some versions of the Khintchine inequality -- Martingale transforms of the Rademacher sequence in symmetric spaces -- Rademacher functions in BMO and Paley spaces -- Rademacher functions in Cesaro type spaces -- Rademacher functions in Morrey spaces -- Appendix A. Some preliminaries from probability theory -- Appendix B. Basic sequences and lacunary systems -- Appendix C. Banach function lattices and symmetric spaces -- Appendix D. Interpolation of operators and spaces of the real method

of interpolation.

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## Sommario/riassunto

This book presents a systematic treatment of the Rademacher system, one of the most important unifying concepts in mathematics, and includes a number of recent important and beautiful results related to the Rademacher functions. The book discusses the relationship between the properties of the Rademacher system and geometry of some function spaces. It consists of three parts, in which this system is considered respectively in  $L_p$ -spaces, in general symmetric spaces and in certain classes of non-symmetric spaces (BMO, Paley, Cesaro, Morrey). The presentation is clear and transparent, providing all main results with detailed proofs. Moreover, literary and historical comments are given at the end of each chapter. This book will be suitable for graduate students and researchers interested in functional analysis, theory of functions and geometry of Banach spaces.

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