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Titolo	Differentiability of six operators on nonsmooth functions and p-variation / / by Richard M. Dudley, Rimas Norvaisa
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Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1703
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Soggetti	Operator theory
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Nota di contenuto	A survey on differentiability of six operators in relation to probability and statistics -- Product integrals, young integrals and p-variation -- Differentiability of the composition and quantile operators for regulated and A. E. continuous functions -- Bibliographies on p-variation and ?-variation.
Sommario/riassunto	The book is about differentiability of six operators on functions or pairs of functions: composition (f of g), integration (of f dg), multiplication and convolution of two functions, both varying, and the product integral and inverse operators for one function. The operators are differentiable with respect to p-variation norms with optimal remainder bounds. Thus the functions as arguments of the operators can be nonsmooth, possibly discontinuous, but four of the six operators turn out to be analytic (holomorphic) for some p-variation norms. The reader will need to know basic real analysis, including Riemann and Lebesgue integration. The book is intended for analysts, statisticians and probabilists. Analysts and statisticians have each studied the differentiability of some of the operators from different viewpoints, and this volume seeks to unify and expand their results.