

CONDITIONAL EXPECTATIONS OF RANDOM LINEAR OPERATORS IN BANACH SPACES

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Abstract. The paper generalizes in various ways factorization property, known till now only for real-valued random variables, to conditional expectations of random linear continuous transformations in Banach spaces measurable with respect to sub- σ -fields. We investigate compositions of random linear operations formed by means of outer and inner maps measurable with respect to sub- σ -fields and prove that under suitable assumptions such operations can be pulled out of the conditional expectation operator.

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