Title: Limits of random iterates

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Given a probability space \((\Omega, A, P)\), a nonempty subset \(X\) of a separable Banach space \(Y\) and an rv-function \(f : X \times \Omega \to X\), we assume that the sequence of iterates of \(f\) converges to a function \(\xi : X \times \Omega^\infty \to Y\). We give conditions on \(f\) and types of convergence which imply continuity of \(\xi\) with respect to the first variable. A possible application of obtained results to iterative equations is presented.

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