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Title: Linear convergence of dynamic string averaging projection methods in the presence of perturbations

Abstract: We study the perturbation resilience of products of an infinite family of nonexpansive operators on a Hilbert space. Our main result indicates that the convergence rate of unperturbed products is essentially preserved in the presence of perturbations. In addition, we show that dynamic string averaging projection methods have a linear rate of convergence and, as an application of the perturbation resilience result, that this rate is preserved under perturbations with a summable sequence of errors. This is joint work with Simeon Reich and Rafal Zalas.