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Dedicated to Prof. Qamrul Hasan Ansari on the occasion of his 60^{th} anniversary

A cyclic coordinate-update fixed point algorithm

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ABSTRACT.

We prove that a cyclic coordinate fixed point algorithm for nonexpansive mappings when the underlying Hilbert space is decomposed into a Cartesian product of finitely many block spaces is weakly convergent to a fixed point of the mapping under investigation. Our result relaxes a condition imposed on the stepsizes of Theorem 3.4 of Chow, et al [Chow, Y. T., Wu, T. and Yin, W., *Cyclic coordinate-update algorithms for fixed-point problems: analysis and applcations*, SIAM J. Sci. Comput., **39** (2017), No. 4, A1280–A1300].

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