The averaged alternating reflection method for solving the convex feasibility problem in geodesic spaces

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The convex feasibility problem for two sets consists of finding a point in the intersection of two nonempty closed and convex sets provided such a point exists. In Hilbert spaces there exists a wide range of algorithms for obtaining sequences of points that converge weakly or in norm (under more restrictive conditions) to a solution of this problem. Recently such algorithms have been studied in nonlinear settings. We focus on the averaged alternating reflection method employed in solving the convex feasibility problem for two sets in geodesic spaces.

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