

COMMON FIXED POINTS BY A GENERALIZED ITERATION SCHEME WITH ERRORS

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Abstract. In this paper, we introduce a generalized iteration scheme with errors for convergence to common fixed points of two nonexpansive mappings. This scheme contains a wide variety of existing iteration schemes as its special cases. The main feature of this scheme is that its special cases can handle both strong convergence like Halpern-type and weak convergence like Ishikawa-type iteration schemes. Our main theorem will in particular generalize a recent result by Kim and Xu [9].

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