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Pei-Kee Lin* (pklin@memphis.edu), Department of Mathematics, University of Memphis, Memphis, TN 38152. *There is an equivalent norm of ℓ_1 that has the fixed point property for nonexpansive mappings.*

Let $\{\gamma_k\}$ be a strictly increasing sequence in $(0, 1)$ that converges to 1. For each k , let $\|\cdot\|_k$ be the semi-norm of ℓ_1 defined by

$$\|(t_n)\|_k = \gamma \sum_{n=k}^{\infty} |t_n|.$$

It is easy to see that the norm, $\|x\| = \sup_{k \in \mathbb{N}} \|x\|_k$, is an equivalent norm of ℓ_1 . In this talk, we show that $(\ell_1, \|\cdot\|)$ has the fixed point property for nonexpansive mapping. (Received July 28, 2008)