



**Patrick N. DOWLING** (dowlinpn@muohio.edu),  
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versity, Oxford, Ohio 45056, USA, *Subsets of  $c_0$  fail-  
ing the fixed point property.*

ABSTRACT. In 1998, Llorens-Fuster and Sims gave examples of closed bounded convex subsets of  $c_0$  which are not weakly compact but are "close to weakly compact" and yet they fail to have the fixed point property for nonexpansive mappings. Based on these examples they conjectured that the only closed bounded non-empty subsets of  $c_0$  which have the fixed point property are the weakly compact ones. We will give examples of subsets of  $c_0$  that are different than those of Llorens-Fuster and Sims and they also fail the fixed point property. This is joint work with Chris Lennard and Barry Turett.