Meeting: 1002, Pittsburgh, Pennsylvania, SS 10A, Special Session on Trends in Operator Theory and Banach Spaces

1002-46-146 P. N. Dowling, C. J. Lennard and B. Turett* (turett@oakland.edu), Department of Mathematics and Statistics, Oakland University, Rochester, MI 48309-4485. New fixed point free nonexpansive maps on weakly compact, convex subsets of L¹[0, 1].

In 1981, D. Alspach gave the first example of a weakly compact, convex subset of a Banach space that fails the fixed point property for nonexpansive mappings. In this talk, a variation of Alspach's example is used to show that every subset of $L^1[0, 1]$ that contains the (nontrivial) intersection of an order interval and finitely many hyperplanes fails to have the fixed point property for nonexpansive mappings. (Received September 13, 2004)