COLLOQUIUM

DEPARTMENT OF MATHEMATICS AND STATISTICS
OAKLAND UNIVERSITY
ROCHESTER, MICHIGAN 48309

Barry Turett
Department of Mathematics and Statistics
Oakland University
Rochester, Michigan

The fixed point property for some subsets of certain classical Banach spaces

Abstract

Determining which nonempty, closed, bounded, convex subsets in a Banach space have the property that every nonexpansive map from the set to itself has a fixed point is a major open problem in fixed point theory. In this talk, we explore connections between weak compactness in Banach spaces and the fixed point property for nonexpansive mappings. In particular, in the setting of many classical Banach spaces, the weakly compact, convex sets can be completely characterized in terms of fixed points of nonexpansive mappings.

372 Science and Engineering Building
Thursday, February 7th, 2002
3:00 to 4:00 P.M.
(Refreshment at 2:30 to 3:00 P.M. in Room 368,
Science and Engineering Building)

About the speaker

Dr. Turett received his Ph.D. in Mathematics from the University of Illinois in 1976. He spent two years as a visiting lecturer at Texas Tech University before coming to Oakland University. He has been a visiting professor at Johannes Kepler Universität Linz in Austria, Miami University in Ohio, University College Galway in Ireland, and Universität Karlsruhe in Germany.