

Departmental Colloquium

Some Examples of the use of nonstandard methods in continuum theory

Steven Leth (University of Northern Colorado)

Abstract: In this talk I will outline some applications of nonstandard methods to the study of compact, connected subsets of the plane. Nonstandard models allow for many complicated limiting properties of a set to be "actualized" in the nonstandard version of the set. This can make objects such as "pseudo-arcs" and other hereditarily indecomposable continua more intuitive to work with. Of particular interest are possible applications to sub-questions of the *plane fixed point problem*, which asks if every compact, connected subset of the plane that does not separate the plane has the fixed point property.

Friday, April 24 at 3:00 PM in SEO 636