Department of Engineering, Mathematic, and Physics Presents

The EMAP 2009 Colloquium

Thursday, October 1st

4:30-5:30pm

Room: LBV 208
Free and Open to Public

Dr. David K. Milovich, Jr.

Assistant Professor of Mathematics

Avoiding top-heavy topological bases

Abstract

Every metric space has a topological base B such that is strongly Noetherian, meaning that each element of B has only finitely many supersets in B. I will give an elementary proof of this. A more involved set-theoretic argument shows that such bases also exist for all compact groups.

For sigma-compact metric spaces and for compact groups, every topological base A actually includes a strongly Noetherian base B as a subset. It seems plausible that this should be true of all metric spaces; this remains an open problem, even for the space of irrationals.

Refreshment Starts at 4:00pm

For additional Information, contact Dr. Fuming Wu. (fwu@tamiu.edu) or (956)326-2600 (office)