1154-37-725 Lori Alvin* (lori.alvin@furman.edu) and James Kelly. Topological Entropy of Markov Set-valued Functions.

We investigate the entropy for a class of upper semi-continuous set-valued functions called Markov set-valued functions, which are a generalization of single-valued Markov interval functions. It is known that the entropy of a Markov interval function can be found by calculating the entropy of an associated shift of finite type. In this talk we construct a similar shift of finite type for Markov set-valued functions and use this shift space to find upper and lower bounds on the entropy of the set-valued functions. (Received September 10, 2019)