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Topological entropy of Markov set-valued functions

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Abstract: 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 function. This is joint work with James Kelly.