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Continuous Markov maps of the interval

**Abstract:** A Markov map of the interval is a pair  $(f, S)$ , where  $f$  is a map of the interval,  $S$  is a finite subset of that interval, and  $f(S) \subset S$ . In this talk we will survey what is known about the following question: given a self-map of  $\{1, 2, \dots, n\}$ , what can be said about **every** continuous Markov map  $(f, S)$ , where  $f|_S$  is conjugate to the self-map via an increasing map? It turns out that there is no harm in assuming that the interval is  $[1, n]$ , that  $S = \{1, 2, \dots, n\}$ , and that  $f$  is monotone on each subinterval  $[i, i + 1]$ . The prototypical result is Sharkovskii's Theorem.