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Jim Wiseman* (jwiseman@agnesscott.edu), Agnes Scott College, 141 E. College Ave.,
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The dynamical properties of a continuous self-map of a compact metric space depend on the resolution at which we study them. In general, more points exhibit recurrent behavior as the resolution becomes coarser. We can measure this dependence using persistence, a technique from topological data analysis. We show how persistence can apply to Morse decompositions of the dynamics, and discuss its properties. (Received September 17, 2021)