

ABSTRACT. With each piecewise monotonic map τ of the unit interval, a dimension triple is associated. The dimension triple, viewed as a $\mathbb{Z}[t, t^{-1}]$ module, is finitely generated, and generators are identified. Dimension groups are computed for Markov maps, unimodal maps, multimodal maps, and interval exchange maps. It is shown that the dimension group defined here is isomorphic to $K_0(A)$, where A is a C*-algebra (an “AI-algebra”) defined in dynamical terms.