1154-03-1514 **Linda Brown Westrick*** (westrick@psu.edu). *Computation and universality in multidimensional symbolic dynamics.*

In symbolic dynamics, the simplest systems to describe are the shifts of finite type (SFTs). However, a simple description does not guarantee simple behavior. It is well-known (but not currently well-exploited) that arbitrary computations can be embedded into the dynamics of $\mathbb{Z}^2$-SFTs. As a result, these "simple" shifts often have behavior just as rich as unrestricted topological dynamical systems. We present a recent example of this phenomenon: the property of topological completely positive entropy is no simpler in $\mathbb{Z}^2$-SFTs than in general topological dynamical systems. (Received September 16, 2019)