
Abstract. We apply some fundamental concepts and results from mathematical logic in order to obtain an apparently new counterexample in symbolic dynamics. Two sets $X$ and $Y$ are said to be Medvedev equivalent if there exist partial recursive functionals from $X$ into $Y$ and vice versa. The Medvedev degree of $X$ is the equivalence class of $X$ under Medvedev equivalence. There is an extensive recursion-theoretic literature on the lattice of Medvedev degrees of nonempty $\Pi^0_1$ subsets of the Cantor space. This lattice is known as $\mathcal{P}_s$. We prove that $\mathcal{P}_s$ consists precisely of the Medvedev degrees of 2-dimensional subshifts of finite type. We use this result to obtain an infinite collection of 2-dimensional subshifts of finite type which are, in a certain sense, mutually incompatible.