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We report on recent joint work with Ronnie Pavlov.

Hochman and Meyerovitch gave a complete characterization of the topological entropies appearing in  $\mathbb{Z}^d$  shifts of finite type (SFTs). Nevertheless their method of construction is quite rigid and yields only relatively degenerate  $\mathbb{Z}^d$  SFTs being a specific extension of a non-trivial zero-entropy factor and lacking any strong mixing property.

In this short presentation we will give a necessary condition for a real number to be realizable as the topological entropy of a block gluing  $\mathbb{Z}^d$  SFT. Subsequently we will present a technique to realize a large class of well-behaved real numbers as entropies of block gluing  $\mathbb{Z}^d$  SFTs for any  $d > 2$ . As a final corollary we get a result about the non-existence of equal-entropy  $\mathbb{Z}^d$  full-shift factors. (Received January 29, 2012)