1089-37-216 **Ronnie Lee Pavlov*** (rpavlov@du.edu), 2360 S. Gaylord St., University of Denver, Denver, CO 80208. *Shifts of finite type with nearly full entropy.*

$\mathbb{Z}^d$ shifts of finite type (or SFTs) are a well-studied class of topological dynamical systems. Informally, a $\mathbb{Z}^d$-SFT X is the set of all functions from $\mathbb{Z}^d$ to a finite alphabet A which satisfy a finite set of "local rules." If these rules involve only pairs of adjacent letters, then the SFT is called "nearest neighbor."

It is well-known that for $d = 1$, any mixing $\mathbb{Z}$-SFT has a unique measure of maximal entropy (the Parry measure). However, it was shown by Burton and Steif that $\mathbb{Z}^d$ SFTs can have multiple measures of maximal entropy for $d > 1$, even if one assumes that the SFT satisfies extremely strong mixing properties such as strong irreducibility.

We present a new sufficient condition for a $\mathbb{Z}^d$-SFT to have a unique m.m.e., which is expressed purely in terms of topological entropy. Namely, for any d, there is a constant $\beta(d) > 0$ so that any nearest-neighbor $\mathbb{Z}^d$-SFT X with alphabet A and topological entropy at least $(\log |A|) - \beta(d)$ has a unique m.m.e. We will also present some examples and background to illustrate how this result compares to other sufficient conditions in the literature. (Received February 15, 2013)