1024-37-57   **Kathleen Madden*** (`kmadden@drew.edu`), Department of Mathematics/Computer Science, Drew University, Madison, NJ 07940, **Aimee Johnson** (`aimee@swarthmore.edu`), Department of Mathematics and Statistics, Swarthmore College, Swarthmore, PA 19081, and **Steve Kass** (`skass@drew.edu`), Department of Mathematics/Computer Science, Drew University, Madison, NJ 07940. *Projectional Entropy in Higher Dimensional Shifts of Finite Type.*

Any higher dimensional shift space $(X, \mathbb{Z}^d)$ contains many lower dimensional shifts spaces obtained by projection onto a subspace L of $\mathbb{Z}^d$. In this work we are concerned with the entropies of these projectional shift spaces. Projectional entropy is not invariant under conjugacy, so we might consider the supremum and infimum of the projectional entropies within a conjugacy class. The supremum, which corresponds to Milnor's notion of directional entropy, is always infinite for shift spaces with positive entropy. In this talk we will discuss what can be said about the infimum of the projectional entropies. In particular, we will show that for shifts of finite type satisfying a mixing condition, this infimum is equal to the full entropy if and only if the shift of finite type is the infinite product of a lower dimensional shift of finite type. (Received December 18, 2006)