1014-42-787 **Marcin Bownik** and **Darrin Speegle*** (speegled@yahoo.com), 221 N Grand Blvd, St Louis, MO 63021. *The Feichtinger Conjecture for frames of translates.*

The Feichtinger Conjecture states that every bounded frame can be written as the finite union of Riesz sequences. In this talk, we consider functions $f \in L^2(R)$ such that $\{f(x+k) : k \in Z\}$ is a frame for its closed linear span, and ask whether Z can be partitioned into sets $\Lambda_1, \ldots, \Lambda_N$ such that $\{f(x+k) : k \in \Lambda_i\}$ is a Riesz sequence for each $1 \leq i \leq N$. By known techniques, it can be shown that if the paving conjecture for Laurent operators is true, then the answer to the above question is "yes". We show that there is a function f such that if $\{f(x+k) : k \in \Lambda\}$ is a Riesz sequence, then Λ must contain arbitrarily long arithmetic sequences of a certain type, improving on a result of Halpern, Kaftal and Weiss. The question as posed above remains open. (Received September 23, 2005)