1106-47-640 **Kelly Bickel*** (kelly.bickel@bucknell.edu) and **Brett D. Wick**. *Well-Localized Operators on Matrix-Weighted L^2 Spaces.*

In this talk, we consider "almost diagonal" operators, called well-localized operators, which map $L^2(\mathbb{R}, \mathbb{R}^n)$ to $L^2(\mathbb{R}, \mathbb{R}^n)$. Such operators include both matrix-valued Haar multipliers and dyadic shifts. In this setting, we obtain a T(1) Theorem characterizing the boundedness of well-localized operators between $L^2(W)$ and $L^2(V)$, where W and V are $n \times n$ matrix A_2 weights. This result generalizes a scalar T(1) theorem due to Nazarov-Treil-Volberg, which played a key role in the proof of the A_2 conjecture for dyadic shifts and related operators. (Received September 03, 2014)