1053-41-197 **Ilya A Krishtal*** (ikrishtal@niu.edu), Northern Illinois University, Department Of Mathematical Sciences, Watson Hall 320, DeKalb, IL 60115. *Wiener's Lemma and frame memory localization.*

A version of Wiener's (Tauberian) lemma states that an invertible matrix with summable diagonals has an inverse in the same class. Summable diagonals is a type of memory localization for the operator defined by the matrix. In this talk we show that other types of memory localization yield similar results for inverse operators. In particular, we consider localization with respect to frames, fusion frames, and g-frames. In this way, we argue that Wiener's Lemma is primarily a statement about the preservation of memory localization by inverse operators. (Received September 03, 2009)