1125-47-1164 Mishko Mitkovski* (mmitkov@clemson.edu). Localized frames and their applications to operator theory. Preliminary report.

In this talk I will present the concept of frame localization. This concept is useful for operator theory because many important classes of operators can be almost-diagonalized with respect to a suitably chosen localized frame. These include: Short Time Fourier Transform multipliers, Calderon-Toeplitz operators, Toeplitz operators on various functions spaces, Anti-Wick operators, some pseudodifferential operators, some Calderon-Zygmund operators, and many others. The goal of my talk will be to show how frame localization can be used in the study of several operator-theoretic questions about these classes of operators. (Received September 15, 2016)