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**Mishko Mitkovski\*** (mishko@math.gatech.edu). *On the basis properties of complex exponentials.*

Questions about various types of expansion properties of the sequence of complex exponentials have a very long history with origins in the works of Paley, Wiener, and Levinson. In this talk we give a characterization of some of these basis properties in terms of the invertibility properties of a certain naturally associated Toeplitz operator. Furthermore, for a given separated frequency sequence  $\Lambda = \{\lambda_n\}$  we show that the supremum of all  $c > 0$  for which the corresponding sequence of complex exponentials  $\{e^{i\lambda_n t}\}$  is  $l^2$ -dependent in  $L^2(0, c)$  is equal to the interior Beurling-Malliavin density of  $\Lambda$ . (Received September 10, 2010)