LOW-LYING ZEROS OF A FAMILY OF AUTOMORPHIC L-FUNCTIONS

MATTHEW KROESCHE

ABSTRACT. In their paper titled "Low-lying zeros of families of L-functions," Iwaniec, Luo, and Sarnak calculated the distribution of low-lying zeros of families of modular L-functions in level aspect for test functions with support contained in $(-2, 2)$. In this work, we have extended this result to thin (in the p-adic sense) subfamilies of these families, obtained by twisting lower-level modular forms by a character, and investigated what can be said about the support and the lower-order terms in the one-level density in this case.