We are interested in the following question: let $f$ be a modular form which is a cuspidal eigenform. Let $K = \mathbb{Q}(\sqrt{D})$ be the quadratic field of discriminant $D$, and $\chi_D$ the associated Dirichlet character. When can one say the central $L$-value $L(1/2, f, \chi_D)$ is nonzero? Many results along the lines of “given $f$, infinitely many quadratic twists are nonzero” are well known. We’ll examine the question of specifically determining which twists are nonzero. This is joint work with Phillipe Michel and Dinakar Ramakrishnan. (Received February 07, 2014)