The \( p \)-th Frobenius powers of an ideal are ubiquitous in positive characteristic commutative algebra. In this talk, we extend this concept, and define the \( \lambda \)-th Frobenius power of an ideal for any non-negative real parameter \( \lambda \). We discuss some basic properties of these objects, and use them to give a positive characteristic analog to Howald’s theorem relating the multiplier ideal of a generic hypersurface with that of its term ideal. This is joint work with Pedro Teixeira and Emily Witt. (Received February 16, 2016)