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Emily E. Witt (witt@ku.edu), **Pedro Teixeira** (pteixeir@knox.edu) and **Daniel J Hernández*** (hernandez@ku.edu). *Frobenius powers of ideals in regular rings.*

The p^e -th Frobenius powers of an ideal are ubiquitous in positive characteristic commutative algebra. In this talk, we extend this concept, and define the λ -th Frobenius power of an ideal for any non-negative real parameter λ . 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)