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Sarah Dumnich* (src210@lehigh.edu), Christmas Saucon Hall, 14 E. Packer Ave, Bethlehem, PA 18015, and **Robert Neel** (robert.neel@lehigh.edu). *Weak Convergence to a Solution of the Dilation Equation for Measures.*

A multiresolution analysis is a tool used in the construction of orthogonal wavelets. The dilation equation is an equation that arises naturally when using an MRA to construct a wavelet basis. One way to understand the dilation equation is through a measure theoretic approach. By constructing a solution to the dilation equation for measures, we are able to uniquely determine a corresponding wavelet basis. In this talk, I will define a sequence of discrete measures μ_n , and show that this sequence weakly converges to a solution of the dilation equation for measures. (Received September 19, 2015)