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**AARON LAUVE**, Loyola University Chicago

*Convolution Powers of the Identity in Graded Connected Hopf Algebras*

We answer the question, “what are the eigenvalues of the  $k$ -th convolution power of the identity operator acting on a graded connected Hopf algebra?” Well, the answer is simple to state, “powers of  $k$  (for any integer  $k$ ).” Thus, we’ll spend most of the time talking about eigenvalue multiplicity, combinatorial implications, and a connection to the classical Frobenius–Schur indicators. This is joint work with Marcelo Aguiar (Texas A&M).