

Meeting: 1003, Atlanta, Georgia, SS 31A, AMS-SIAM Special Session on Integrable Systems and Special Functions, I

1003-05-1136 **Luc Lapointe** (lapointe@inst-mat.otalca.cl), Instituto de Matematica y Fisica, Universidad de Talca, Casilla 747, Talca, Chile, and **Jennifer Morse*** (morsej@math.miami.edu), Department of Mathematics, University of Miami, Coral Gables, FL 33124. *k-Schur functions: why are they special?*

The k -Schur functions arose from the study of Macdonald polynomials as a basis giving natural expansion coefficients. We will discuss how the k -Schur functions play a central role in the theory of symmetric functions, through a connection with topics such as the Young lattice, affine permutations, representation theory, and quantum cohomology. (Received October 04, 2004)