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Karl Mahlburg* (mahlburg@math.lsu.edu). *Asymptotic behavior of unimodal sequences.*

A sequence of positive integers is unimodal if the entries are initially monotonically increasing until a peak value is reached, and are subsequently monotonically decreasing. These sequences and their variants have been studied for their interest in combinatorics, the theory of partitions, and statistical mechanics. The main results presented in this talk will address the asymptotic analysis of unimodal sequences, and the relationship to recent developments in the theory of mock modular forms, meromorphic Jacob forms, and false theta functions. (Received December 03, 2012)