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Kathrin Bringmann, Chris Jennings-Shaffer* (christopher.jennings-shaffer@du.edu)
and **Karl Mahlburg**. *Asymptotics for Statistics on Unimodal Sequences*.

A unimodal sequence of a positive integer n is a sequence of positive integers that sum to n , while also being unimodal in the sense that the sequence is weakly increasing to a peak and is then weakly decreasing past this peak. One statistic on such sequences measures how far the peak is from the center of the sequence. A method for deriving the asymptotic behavior of such a statistic is based on identities for basic hypergeometric series, asymptotic expansions of holomorphic functions, and the method of moments from probability. We give a summary of this method, some recent results, and mention some variations. (Received March 02, 2020)