

1135-05-3222

**Jordan Olliver Tirrell\*** (jtirrell@mtholyoke.edu). *Combinatorics of orthogonal polynomials and skew tableaux.*

Viennot and Flajolet developed the combinatorial theory of orthogonal polynomials, which interprets a moment sequence as an enumeration of weighted Motzkin paths. We will show how this can be used to obtain elementary combinatorial proofs for certain enumerative formulas. Our main example extends a bijection between Motzkin paths and Young tableaux with at most three rows to the case of skew tableaux, which we enumerate using Chebyshev polynomials. (Received September 27, 2017)