



LAURENT BIORTHOGONAL POLYNOMIALS AND RIORDAN ARRAYS

Paul Barry

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Abstract

We show that Laurent biorthogonal polynomials whose defining three-term recurrence have constant coefficients have coefficient arrays that are Riordan arrays. For each such family of Laurent biorthogonal polynomials we associate in a natural way a family of orthogonal polynomials. We also extend these results to a notion of generalized orthogonal polynomials whose recurrence depends on three parameters.

Keywords and phrases: Riordan array, Laurent biorthogonal polynomials, orthogonal polynomials, generalized orthogonal polynomial, A sequence, Z sequence, production matrix.

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