NON–STANDARD ORTHOGONALITY FOR MEIXNER POLYNOMIALS[*]

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Abstract. In this work, we obtain a non–standard orthogonality property for Meixner polynomials $\{M_n^{(\gamma,\mu)}\}_{n\geq 0}$, with $0 < \mu < 1$ and $\gamma \in \mathbb{R}$, that is, we show that they are orthogonal with respect to some discrete inner product involving difference operators. The non–standard orthogonality can be used to recover properties of these Meixner polynomials, e. g., linear relations for the classical Meixner polynomials.

Key words. Meixner polynomials, inner product involving difference operators, non–standard orthogonality.

AMS subject classifications. 33C45.