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SOME INTERESTING EXAMPLES OF DISCRETE FAMILIES OF ORTHOGONAL MATRIX POLYNOMIALS

VANESA SNCHEZ CANALES

In this talk we show several examples of discrete orthogonal matrix polynomials in arbitrary size defined by a matrix Rodrigues' formula. These examples satisfy some interesting properties: they are eigenfunctions of a second order difference operator, their differences are orthogonal. We also show that these properties are equivalent in the scalar case but not in the matrix one.

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