

## Zero asymptotic behaviour for orthogonal matrix polynomials and examples

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In the paper *Zero asymptotic behaviour for orthogonal matrix polynomials*, J. d'Anal. Math., **78**, (1999), 37-60, by E.B. Saff, P. López and myself, we established zero behaviour for orthogonal matrix polynomials under the hypothesis of having convergent recurrence coefficients. At that moment (1999), we could not complete that result with any examples of families satisfying such natural hypothesis. The purpose of this talk is to show such examples, that is, weight matrices having families of orthogonal matrix polynomials with convergent recurrence coefficients. In addition, those orthogonal matrix polynomials also satisfy other very important property: as the classical scalar cases of Jacobi, Laguerre and Hermite, they also satisfy second order differential equations with differential coefficients independent of  $n$ .