CHRISTOFFEL FUNCTIONS FOR MULTIPLE ORTHOGONAL POLYNOMIALS

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We will talk about the asymptotic behaviour of the Christoffel-Darboux kernel for multiple orthogonal polynomials on the main diagonal. We show that the weak limit of $K_n(x,x)/n d\mu$ is under some hypotheses the same as the limit of the normalized zero counting measure of the type II multiple orthogonal polynomials. The Christoffel-Darboux kernel $K_n(x,y)$ for multiple orthogonal polynomials is not symmetric which complicates the analysis.

This is joint work with Grzegorz Świderski.

