Asymptotics for generalized Freud polynomials*

Juan José Moreno Balcázar

Departamento de Matemáticas
Universidad de Almería

Abstract

In this talk we provide the Mehler–Heine type formulae for orthonormal polynomials with respect to generalized Freud weights. Using this type of asymptotics, we can give estimates of the value at the origin of these polynomials and of all their derivatives as well as the asymptotic behavior of the corresponding zeros.

^{*}This is a joint work with M. Alfaro, A. Peña and M. L. Rezola.