

Zeros of Multiple Orthogonal Polynomials

Rostyslav Kozhan

Uppsala University

We demonstrate how the Christoffel transform serves as a natural tool to analyze the location and interlacing property of zeros of orthogonal polynomials. We apply this approach to multiple orthogonal polynomials of type I and type II for Angelesco, AT, and Nikishin systems on the real line. Furthermore, we extend this methodology to the unit circle, where we analyze both multiple orthogonal and paraorthogonal polynomials for Angelesco and AT systems. Joint work with Marcus Vaktnäs.