

**Generalized Jacobi polynomials on a cross****08.04****Ahmad Barhoumi***(Indiana University IUPUI, USA)***Time:** Wednesday 24.07., 12:00 - 12:30, Room HS 3

**Abstract:** Polynomials satisfying a non-Hermitian orthogonality relation appear naturally in many places, one of which is the construction of Padé approximants. One feature that sets these polynomials apart from orthogonal polynomials on the real line is that the degree of the polynomial orthogonal up to order  $n$  may be less than  $n$ . In this talk, I will discuss the asymptotic analysis of a specific family of Jacobi-type polynomials via Riemann–Hilbert Problem while highlighting how the degeneration of degree displays itself in the analysis. *Joint work with Maxim Yattselev.*