

Asymptotics of the recurrence coefficients of multiple orthogonal polynomials for Angelesco systems

05.03 Maxim Yattselev

(Indiana University-Purdue University, Indianapolis, USA)

Time: Monday 22.07., 11:30 - 12:00, Room HS 3

Abstract: In this talk I will describe asymptotics of the multiple orthogonal polynomials and their recurrence coefficients for an Angelesco system of two measures (measures are absolutely continuous with respect to the Lebesgue measure and have non-vanishing smooth densities) along all sequences of indices (n_1, n_2) for which n_1/n_2 has a limit (possibly infinite). Application to the recovery of the essential spectrum of a Jacobi operator on a 2-homogeneous rooted tree will be provided.

Joint work with A. I. Aptekarev and S. A. Denisov