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“Ratio Asymptotics and Weak Asymptotic Measures for General Orthogonal Polynomials”

Tuesday, 19th May 2015, 16:00-17:00
FST01-Room 037

Abstract:

The theory of orthogonal polynomials on the real line is a classical and highly developed field that includes many deep results. One essential aspect of the theory is the existence of a three-term recurrence relation satisfied by the orthonormal polynomials in that setting. In more general settings, this recurrence relation does not exist, but one can still generalize much of the theory from the setting of the real line to more general measures. In this talk, we will discuss the particular phenomena known as ratio asymptotics and weak asymptotic measures in the context of general orthogonal polynomials. As in the case of the real line, results from operator theory will play an essential role, though the calculations become more complicated in the general setting.