

ANALYSIS SEMINAR
STRONG ASYMPTOTICS FOR
ORTHOGONAL POLYNOMIALS
IN WEIGHTED BERGMAN SPACES
OF THE UNIT DISK

Erwin Miña – Diaz

Department of Mathematics, University of Mississippi

THURSDAY NOVEMBER 4, 2010 AT 8:00 AM IN HUME 321

Abstract: *In this talk we present a new series representation for polynomials orthogonal over the complex unit disk with respect to a weight of the form $|h(z)|^p$, with $h(z)$ an analytic function in the closed unit disk $|z| < 1$ that does not vanish on the circle $|z| = 1$. This representation allows us to establish the strong asymptotic behavior of the polynomials at every point of the complex plane.*