COMPLEX ANALYSIS SEMINAR

GREEN'S POTENTIAL AND THE DEGREE OF RATIONAL APPROXIMATION

Mehrdad Simkani

University of Michigan–Flint

ABSTRACT: We will see a connection between the geometric rate of convergence of some sequence of rational functions and the minimum value of Green's potential of some measure, where the minimum is taken over the natural (meromorphic) boundary of the limiting function. The measure in question reflects the limiting behavior of the poles of the approximating rational functions. The approximation takes place over a closed subset of the extended complex plane. This talk relates rational approximation to the classical potential theory over the extended complex plane.

Date: Thursday, April 1, 2010

Time: 4pm-5pm

Place: UH 4010

Webpage: `http://math.utoledo.edu/~sonmez/complexseminar.html`