Department of Mathematical Sciences
Faculty and Graduate Research Colloquium

Thursday, April 25, 2024
1:00 – 1:50 PM
RB 450

"Geometric Limits in Complex Dynamics"
Scott Kaschner (Butler University)

Abstract:

Abstract: "Iteration of rational maps of one or several complex variables is the broad field that contains most of the ideas in this talk; a brief survey will be provided. More specifically, for a sequence of maps of one complex variable, f_n , given by polynomials whose degree is a function of n, the geometric limit as n approaches infinity of the filled Julia set, the set of points that remain bounded under iteration by f_n, has been studied in a variety of contexts. The limiting behavior of these sets is one such context. I will provide a brief history of results relating to this limiting behavior and some new generalizations."