Department of Mathematics and Computer Science

Friday, November 15, 2019, 4:10 pm

COLLOQUIUM TALK

Speaker: Richard Koss (EIU)

Old Main 2210

Descent Approaches to Finding Roots

Abstract:

We will discuss two descent methods of finding zeros for a function of a complex variable. The topics we discuss will include a way to visually observe the zeros of these functions, two algorithms to acquire these zeros (one of which extends to several complex variables), and a brief history of how these things came about. There will be examples and live demonstrations of the algorithms to illustrate all of these things, and they will be discussed in a manner that should be accessible to anyone. Therefore, the only prerequisite is a desire to see something interesting. This talk will present some of the findings based on joint work with Chad Kelterborn (the University of North Carolina at Chapel Hill), Marcin Mazur (Binghamton University), and Bogdan Petrenko (EIU).