1056-30-1048 **Rich L Stankewitz*** (rstankewitz@bsu.edu), Dept. of Mathematical Sciences, Muncie, IN 47306. *Research in Complex Dynamics using Java Applets.*

Recently many Java applets were created, together with Jim Rolf, primarily for undergraduate students to use to explore complex dynamics phenomena (e.g., chaos, fractals, attracting basins) in conjunction with a new text designed to inspire student driven research (in several areas of complex analysis). Long time researchers can also make use of these applets in their own research and teaching. In this talk we tour just a few of the uses of these applets, touching on several as time permits. Specifically, we discuss the applets designed for investigating real and complex Newton's method, polynomial and exponential iteration, and their corresponding parameter planes. (Received September 20, 2009)