1154-G5-2152   **Kasey Bray**, **Jerry Dwyer**, **Roger W. Barnard**, **Erin Williams** and **G. Brock Williams***
(`brock.williams@ttu.edu`). *Iteration of Newton Maps.*

Newton's method is a well-known process for locating roots of a function f using the iterative formula $z_{n+1} = z_n - \frac{f(z_n)}{f'(z_n)}$. The associated function $F(z) = z - \frac{f(z)}{f'(z)}$ is the Newton map for f.

We will discuss the iteration of Newton maps for various classes of rational and trigonometric functions. (Received September 17, 2019)