Joshua J Clemons\* (jclemons@vt.edu), Joshua Clemons, Dept. of Mathematics, 460 McBryde, Virginia Tech, Blacksburg, NC 24061-0123. Quadratic-like mappings and iterated Weierstrass elliptic functions.

Using the pioneering work of Douady and Hubbard on so called polynomial-like mappings, we show that the parameter space (properly defined) of Weierstrass elliptic functions on square lattices contains infinitely many dynamically distinct Mandelbrot sets. We make use of a square "checkered" tiling of the plane to describe the locations of these Mandelbrot sets. This is completed PhD work under the supervision of Jane M. Hawkins. (Received July 28, 2010)