1078-11-378   **Brett A. Tangedal*** (`batanged@uncg.edu`). *Computing Stark units p-adically via a formula of Gross.*

We will present the first systematic computations verifying a p-adic conjecture of "Stark-type" put forth by B. Gross in 1981. These verifications rely upon a recent theorem due to Kashio as well as a new formula discovered by us that allows for the efficient computation of p-adic multiple log gamma functions. This is joint work with Paul Young. (Received December 13, 2011)