

Meeting: 1007, Santa Barbara, California, SS 13A, Special Session on Arithmetic Geometry

1007-11-120 **Stefan Erickson*** (erickson@math.ucsd.edu), Department of Mathematics, University of California, San Diego, 9500 Gilman Dr., Dept. 0112, La Jolla, CA 92093-0112. *Variations on a Theme of Stark*. Preliminary report.

The First Order Abelian Stark Conjecture over \mathbb{Z} assumes that the set of primes excluded from the Euler expansion of the imprimitive L -functions for an abelian extension K/k includes a distinguished prime which splits completely. In this talk, we relax this splitting condition and prove the generalization in several particular cases. We also provide examples and explicitly compute the Stark units in these cases. (Received February 14, 2005)