

1078-11-114

Jonathan W Sands* (sands@cems.uvm.edu), Dept. of Mathematics and Statistics, 16 Colchester Ave., Burlington, VT 05401. *L-functions at the origin and annihilation of S-class groups in multiquadratic extensions.*

Fix any Galois extension K/F of number fields with Galois group of exponent 2, and let S be a finite set of primes of F containing the infinite primes and those which ramify in K . We obtain non-trivial annihilators for the S -class group of K from the S -modified equivariant L -function of K/F , regardless of the order of vanishing at the origin. (Received November 29, 2011)