

1023-11-949

Barry R. Smith* (bsmith@math.ucsd.edu). *Annihilation of Class Groups in Abelian Number Field Extensions of Degree $2p$* . Preliminary report.

An explicit form for the L -function evaluator associated to a degree $2p$ abelian extension K/k of number fields will be discussed. Furthermore, instances will be given where this expression can be used to determine pieces of the ideal class group of K that are annihilated by a suitable multiple of the L -function evaluator. As a consequence, this will provide evidence in support of Brumer's conjecture for this class of extensions. (Received September 25, 2006)