

1086-11-274

Dawn Nelson* (dnelson@bates.edu), Bates College, Department of Mathematics, 3 Andrews Rd, Lewiston, ME 04240. *A Variation on Leopoldt's Conjecture for Galois Number Fields.*

Leopoldt's Conjecture is a statement about the relationship between the global and local units of a number field. Informally the conjecture states that the \mathbb{Z}_p -rank of the diagonal embedding of the global units into the product of *all* local units equals the \mathbb{Z} -rank of the global units. We consider the question: Can we say anything about the \mathbb{Z}_p -rank of the diagonal embedding of the global units into the product of *some* local units? We answer the question in the affirmative. (Received August 15, 2012)