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Jay A Wood* (jay.wood@wmich.edu), Department of Mathematics, Western Michigan University, 1903 W Michigan Ave, Kalamazoo, MI 49008. *The Extension Theorem for Lee Weight.*

The extension theorem holds for the Lee and Euclidean weights over $\mathbb{Z}/p^k\mathbb{Z}$, p prime. That is, every isometry for those weights extends to a signed permutation. The proof involves showing a certain matrix is invertible. The determinant of this matrix equals a product of Fourier coefficients, each one of which is non-zero because of properties of generalized Bernoulli numbers and Dirichlet L -functions. This is joint work with Serhii Dyshko and Philippe Langevin. (Received August 16, 2016)