1126-20-401 **M. Ryan Julian*** (mrjulian@math.wisc.edu), 480 Lincoln Drive, Madison, WI 53706. *Codes Over Non-Abelian Groups Do Not Have MacWilliams Duality.*

There is a well established theory of dual codes over finite fields along with MacWilliams identities relating the weight enumerator polynomials of these codes. Dougherty, Kim, and Solé have asked whether there is a similar duality theory for codes over non-abelian groups. We show that there does not exist any finite non-abelian group G with a MacWilliams-type duality on the subgroups of G^n for all n. (Received January 18, 2017)