

1089-11-24

Charles L Samuels* (clsamuels@okcu.edu), Oklahoma City University, Department of Mathematics, 2501 N. Blackwelder, Oklahoma City, OK 73102. *Metric height functions on an Abelian group.*

Recent work of the author explored a modified version of the Mahler measure that is well-defined on the group of non-zero algebraic numbers modulo the roots of unity. The construction that leads to these metric Mahler measures may be applied to functions other than the Mahler measure. We describe this generalization and provide analogs of known results in the abstract case. This exploration provides a resolution to a conjecture on the original metric Mahler measure. (Received January 04, 2013)