

Note on “On a theorem of Chowla” [3]

In [3], we gave a necessary and sufficient condition for normalized Gauss sums over finite fields to be roots of unity. After its publication, we learned that an equivalent condition was given by Evans [1, Theorem 4].

For a related result on normalized Jacobi sums, see [2, Lemma 3.1].

References

- [1] R. J. Evans, *Generalizations of a theorem of Chowla on Gaussian sums*, Houston J. Math. **3** (1977), no. 3, 343–349. MR0498491 (58 #16600)
- [2] T. Shioda and T. Katsura, *On Fermat varieties*, Tôhoku Math. J. (2) **31** (1979), no. 1, 97–115, DOI 10.2748/tmj/1178229881. MR526513 (80g:14033)
- [3] J. Yang and W. Zheng, *On a theorem of Chowla*, J. Number Theory **106** (2004), no. 1, 50–55, DOI 10.1016/j.jnt.2003.11.010. MR2049591 (2005b:11197)