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**Mairead Greene\*** ([greenemath.umass.edu](mailto:greenemath@math.umass.edu)). *Improvements on the Index of Cyclotomic Units.*

Cyclotomic units have been important in number theory for centuries and are also relevant in areas of algebra and topology. There is a formula giving the index of the cyclotomic units in the full unit group in terms of the class number. The case with prime power conductor has been understood since Kummer. The more recent work on the general conductor case has been done by Ramachandra, Levesque, Greither and Kucera. I will present further improvements on this work focussing on the case where the conductor is only divisible by two primes. (Received July 31, 2006)