1078-11-341 **Robert J Lemke Oliver*** (`rlemkeo@emory.edu`). *Pretentiously detecting power cancellation.*

Granville and Soundararajan have recently introduced the notion of pretentiousness in the study of multiplicative functions of modulus bounded by 1, essentially the idea that two functions which are similar in a precise sense should exhibit similar behavior. It turns out, somewhat surprisingly, that this does not directly extend to detecting power cancellation - there are multiplicative functions which exhibit as much cancellation as possible in their partial sums that, modified slightly, give rise to functions which exhibit almost as little as possible. We develop two new notions of pretentiousness under which power cancellation can be detected, one of which applies to a much broader class of multiplicative functions. This work is joint with Junehyuk Jung. (Received December 13, 2011)