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Chinthaka N Kuruwita<sup>\*</sup> (ckuruwit@hamilton.edu), Department of Mathematics, Hamilton College, Clinton, NY 13323, and Colin M Gallagher and K B Kulasekera. Testing Equality of Nonparametric Quantile Regression Functions.

This article proposes a new approach for testing the equality of nonparametric quantile regression functions. We use marked empirical processes to develop test statistics that possess good power properties in contrast to available competitors. Finite sample performance of our approach is analyzed through simulations and compared with existing methods under a variety of settings. Two data examples are given that highlights the usefulness of the proposed methodology. (Received September 25, 2012)