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**Vladimir Temlyakov** and **Mingrui Yang\*** ([yangm@mailbox.sc.edu](mailto:yangm@mailbox.sc.edu)), Department of Mathematics, LeConte College, 1523 Greene Street, University of South Carolina, Columbia, SC 29208, and **Peixin Ye**. *Greedy Approximation with regard to Non-greedy Bases*.

The main goal of this paper is to understand which properties of a basis are important for certain direct and inverse theorems in nonlinear approximation. We study greedy approximation with regard to bases with different properties. We consider bases that are tensor products of univariate greedy bases. Some results known for unconditional bases are extended to the case of quasi-greedy bases. (Received August 29, 2009)