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**Huybrechts Bindele\*** ([hbindele@southalabama.edu](mailto:hbindele@southalabama.edu)), 411 University Blvd. North, ILB 325, Mobile, AL 36688-0002, and **Asheber Abebe**. *semi-parametric rank regression with missing response*.

In this paper, we consider a semi-parametric regression model with responses missing at random. We study the rank estimator of the regression coefficient. We establish conditions needed for the consistency and asymptotic normality of the proposed estimator. Real life examples and Monte Carlo simulation experiments show that the proposed estimator has a smaller MSE compared to that obtained based on the least squares procedure for heavy tailed or contaminated data. (Received September 06, 2012)