Eddy A Kwessi* (ekwessi@trinity.edu), One Trinity Place, San Antonio, TX 78212, and Brice M Nguelifack (bmn0003@auburn.edu), Auburn, AL 36849. Signed-Rank Estimation of Partial Linear Models with B-splines.

For a partially linear regression model, we propose a Signed-Rank estimation method. The proposed estimator for the linear unknown parameter vector is shown to have root-n consistency while monotone B-splines are used to estimate the unknown nonparametric function. Finite samples simulations are carried out to evaluate the performance of the proposed method and practical applications including the study of Air Pollution data and the study Survival Time after Liver Transplant data are given. (Received September 15, 2014)