1086-VI-2959 **Guy-vanie M Miakonkana*** (gmm0006@auburn.edu), 221 Parker Hall, Auburn University, Auburn, AL 368349, and **Ash Abebe**. *Rank Based Group Variables Selection in Linear Models.*

We develop a new group variable selection method that removes unimportant groups effectively in linear regression models. The proposed method is based on a penalized rank dispersion function and is robust to outliers in the response direction.We establish the asymptotic normality and the oracle property of the resulting estimator.Numerical studies indicate that our rank-based method performs better than the adaptive lasso for both light and heavy-tailed error distribution. (Received September 26, 2012)