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**KEITH KNIGHT**, University of Toronto

*Some asymptotics for elemental regression estimators*

Consider a linear regression model  $Y_i = x_i^T \beta + \varepsilon_i$  ( $i = 1, \dots, n$ ). Elemental regression estimators are defined to be estimators based on exactly  $p$  cases where  $p$  is the dimension of the predictors  $\{x_i\}$ . Some estimators (for example,  $L_1$  estimators) are exactly elemental estimators while in other cases, estimators can be well-approximated by elemental estimators. In this paper, we will consider the asymptotic distribution for the approximation error for a certain class of estimators as well as the asymptotic distribution of the predictors in the best elemental set.