1145-VT-2260 **Lasanthi C Pelawa Watagoda*** (`lasanthi@appstate.edu`), 121 Bodenheimer Dr., Department of Mathematical Sciences, Appalachian State University, Boone, NC 28608, and **David J Olive**.
Bootstrapping Multiple Linear Regression After Variable Selection.

This paper suggests a method for bootstrapping the multiple linear regression model $Y = \beta_1 x_1 + \cdots + \beta_p x_p + e$ after variable selection. We develop asymptotic theory for some common least squares variable selection estimators such as forward selection with C_p. Then hypothesis testing is done using three confidence regions, one of which is new. Theory suggests that the three confidence regions tend to have coverage at least as high as the nominal coverage if the sample size is large enough. (Received September 25, 2018)