



# Estimating valid standard errors for the **Bayesian Lasso**

## Goal

- Improve the estimate of posterior variances

## Context

- Linear regression models

## Method

- Post-processing of variational Bayes (VB) estimated model parameters

## Contributions

- **1000x faster** than MCMC
- Works in high dimensions ( $p > n$ )
- **Valid standard error** estimates
  - our method (**black**) matches gold standard MCMC (**red**) when existing method fails (**blue**)

