

BUSTED inference

- Because BUSTED is a random-effects method, it **pools** information across multiple sites and branches to gain power
- The cost to this pooling is lack of site-level **resolution**, i.e., it is not immediately obvious which sites and/or branches drive the signal
- Standard ways to extract individual site contributions to the overall signal is to perform a post-hoc analysis, such as empirical Bayes, or “category loading”
- For BUSTED, “category loading” is faster and experimentally better
- Can also compute exploratory evidence for selection support along individual branches at specific sites

Figure 1. Empirical Bayes Factors for $\omega > 1$ at a particular branch and site (only tested branches are included).

