Goal: Use truncated SBP with covariates to simultaneously perform model selection on covariates and number of groups

Model: Let be the species of individual i in location l. We assume that:

where is a latent variable indicating the group membership of individual i in location l. We assume that:

We adopt the following priors:

In relation to , we adopt a probit regression formulation of a truncated stick breaking prior:

#----------------------------------------

FCD’s

We will sample these variables jointly:

This is going to be sampled using a random walk MH algorithm.

* For :

Where