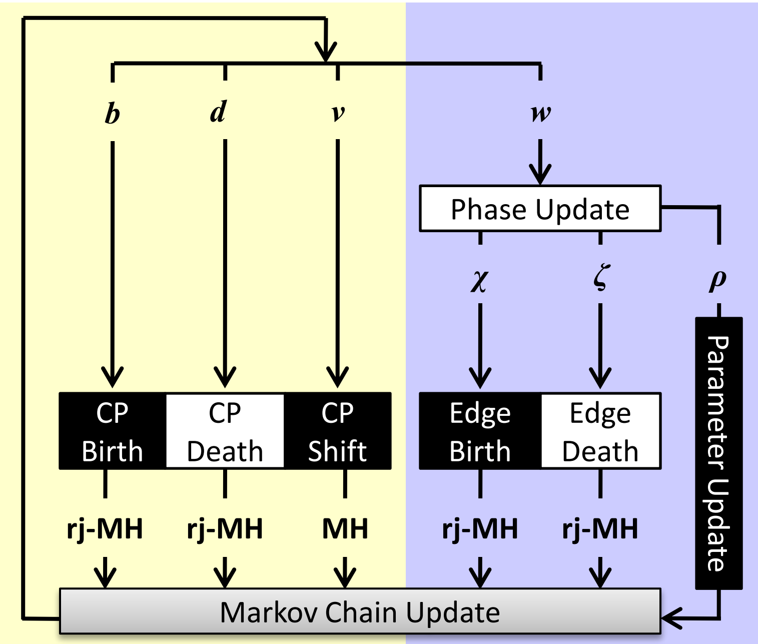
A



B

ARTIVA algorithm

1. Initialization: set $(k^i, \xi^i, s^i, \mathrm{Pa}^i, \theta^i)$
2. Iteration l :

Sample $u \sim \mathcal{U}_{[0,1]}$.
if $(u \leq b_k)$ **then**
  consider changepoint birth
else if $(u \leq b_k + d_k)$ **then**
  consider changepoint death
else if $(u \leq b_k + d_k + v_k)$ **then**
  consider changepoint position shift
else consider Regression model change within phases

3. $l \leftarrow l + 1$ and go to 2.