

$$\mathcal{L}_A(\theta, \alpha_A)$$

$$\mathcal{L}_B(\theta, \alpha_B)$$

$$\pi_{AB}(\theta, \alpha_A, \alpha_B)$$

$$\mathcal{L}_A(\theta, \alpha_A) \mathcal{L}_B(\theta, \alpha_B)$$

Nested Sampling  
with  $\theta$ ,  $\alpha_A$  and  $\alpha_B$

$$\mathcal{Z}_{AB}$$

$$\{\theta\} \mathcal{P}_{AB}$$

$$\{\alpha_A, \alpha_B\} \mathcal{P}_{AB}$$