

$$\begin{array}{c}
 x_{ij} \sim \text{Normal}(\tau_j + \sum_{m=1}^M \lambda_{j,m} \xi_{i,m}, \psi_{jj}) \\
 \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \downarrow \\
 \qquad \qquad \qquad \qquad \qquad \psi_{jj} \sim \text{InvGamma}(\nu_\psi/2, \nu_\psi \psi_0/2) \\
 \qquad \qquad \qquad \qquad \qquad \downarrow \\
 \qquad \qquad \qquad \qquad \qquad \xi_{i,m} \sim \text{MVN}_M(\boldsymbol{\kappa}, \boldsymbol{\Phi}) \\
 \qquad \qquad \qquad \qquad \qquad \downarrow \qquad \qquad \qquad \searrow \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \boldsymbol{\Phi} \sim \text{InvWishart}(\boldsymbol{\Phi}_0, d) \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \downarrow \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \kappa_m \stackrel{iid}{\sim} \text{Normal}(\mu_\kappa, \sigma_\kappa^2) \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \downarrow \\
 \qquad \qquad \qquad \qquad \qquad \qquad \qquad \lambda_{j,m} \sim \begin{cases} 1, & \text{if } j = 1, m = 1 \\ 1, & \text{if } j = 4, m = 2 \\ \text{Normal}(\mu_\lambda, \sigma_\lambda^2), & \text{if } j = 2, 3, m = 1 \\ \text{Normal}(\mu_\lambda, \sigma_\lambda^2), & \text{if } j = 5, m = 2 \\ 0 & \text{otherwise} \end{cases} \\
 \downarrow \\
 \tau_j \sim \text{Normal}(\mu_\tau, \sigma_\tau^2)
 \end{array}$$