$$
\begin{aligned}
\phi_{gs} &\sim \text{Uniform}(0,1) \\
z_{gst} &\sim \text{Bernoulli}(\phi_{gs}) \\
\alpha &\sim \text{gamma}(2, 0.5) \\
\alpha_{diff} &\sim \text{Gaussian}(0, 0.5) \\
\alpha_g^\mu &= \begin{cases} \alpha - 0.5 * \alpha_{diff} & \text{if } g = \text{old} \\ \alpha + 0.5 * \alpha_{diff} & \text{if } g = \text{young} \end{cases} \\
\alpha_g^\sigma &\sim \exp(1) \\
\alpha_{gs} &\sim \text{Gaussian}(\alpha_g^\mu, \alpha_g^\sigma) \\
\beta &\sim \text{beta}(2, 2) \\
\beta_{diff} &\sim \text{Gaussian}(0, 0.125) \\
\beta_g^\mu &= \begin{cases} \beta - 0.5 * \beta_{diff} & \text{if } g = \text{old} \\ \beta + 0.5 * \beta_{diff} & \text{if } g = \text{young} \end{cases} \\
\beta_g^\sigma &\sim \exp(25) \\
\beta_{gs}^\mu &\sim \text{Gaussian}(\beta_g^\mu, \beta_g^\sigma) \\
\beta_{gs}^\sigma &\sim \exp(25) \\
\beta_{gst} &\sim \text{Gaussian}(\beta_{gs}^\mu, \beta_{gs}^\sigma) \\
\tau &\sim \text{gamma}(2, 0.4) \\
\tau_{diff} &\sim \text{Gaussian}(0, 0.15) \\
\tau_g^\mu &= \begin{cases} \tau - 0.5 * \tau_{diff} & \text{if } g = \text{young} \\ \tau + 0.5 * \tau_{diff} & \text{if } g = \text{old} \end{cases} \\
\tau_g^\sigma &\sim \exp(3) \\
\tau_{gs}^\mu &\sim \text{Gaussian}(\tau_g^\mu, \tau_g^\sigma) \\
\tau_{gs}^\sigma &\sim \exp(3) \\
\tau_{gst} &\sim \text{Gaussian}(\tau_{gs}^\mu, \tau_{gs}^\sigma) \\
\delta_c &\sim \text{Gaussian}(0, 2.5) \\
\delta_{cdiff} &\sim \text{Gaussian}(0, 1.5) \\
\delta_{gc}^\mu &= \begin{cases} \delta_c - 0.5 * \delta_{cdiff} & \text{if } g = \text{young} \\ \delta_c + 0.5 * \delta_{cdiff} & \text{if } g = \text{old} \end{cases} \\
\delta_{gc}^\sigma &\sim \exp(1) \\
\delta_{gsc}^\mu &\sim \text{Gaussian}(\delta_{gc}^\mu, \delta_{gc}^\sigma) \\
\delta_{gs}^\sigma &\sim \exp(1) \\
\delta_{gsct} &\sim \text{Gaussian}(\delta_{gsc}^\mu, \delta_{gs}^\sigma)
\end{aligned}
$$