

# Final Project

Betsy Cowdery

Data Model :

$$Y_i \sim N_p(\vec{\mu}_i, \Sigma)$$

$$Y_{i,j}^{(0)} \sim N_p(Y_{i,j}, \sigma^2)$$

Process Model :

$$\sigma^2 \sim IG(s_1, s_2)$$

$$\mu_{i,j} \sim N(\mu_0, V_\mu)$$

$$\Sigma \sim IW(V, df)$$

Parameter Model:

$$Y_{i,j}^{(0)} \quad Y_i$$

$$\sigma^2 \quad [\mu_1, \dots, \mu_p]_i \quad , \quad \Sigma$$

$$s_1, s_2 \quad \mu_0, V_\mu \quad V, df$$

Data Model :

$$Y_{i,j} \sim N(\mu_{i,j}, \sigma^2)$$

Process Model :

$$\sigma^2 \sim IG(s_1, s_2)$$

$$\mu_{i,j} \sim N(\mu_0, V_\mu)$$

Parameter Model:

$$Y_{i,1}, \dots, Y_{i,p}$$

$$\mu_{i,1}, \dots, \mu_{i,p} \quad , \quad \sigma^2$$

$$\mu_0, V_\mu \quad s_1, s_2$$