

Define [

$$am_{i,j \rightarrow k} = \Lambda^2 \mathbb{E}_{\{i,j\} \rightarrow \{k\}} \left[(\alpha_i + \alpha_j) a_k + (\mathcal{R}_j^{-1} \xi_i + \xi_j) x_k \right],$$

$$bm_{i,j \rightarrow k} = \Lambda^2 \mathbb{E}_{\{i,j\} \rightarrow \{k\}} \left[(\beta_i + \beta_j) b_k + (\eta_i + e^{-e^{\beta_i}} \eta_j) y_k \right]$$