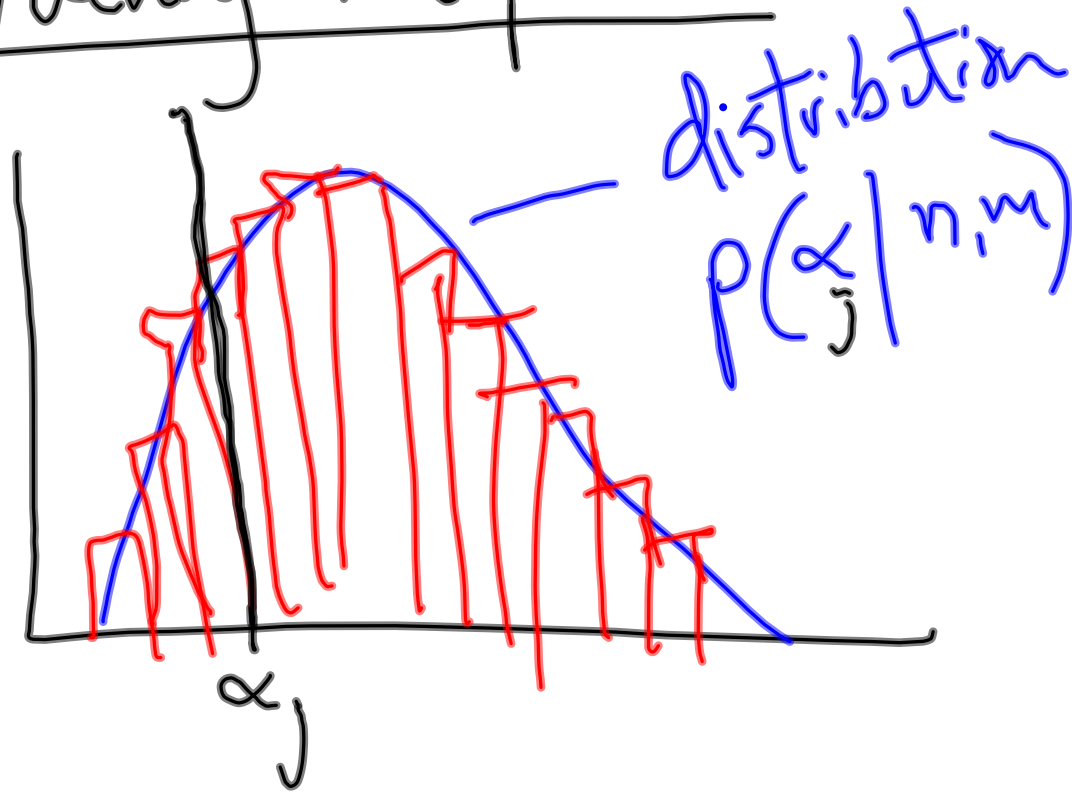


Frequency interpretation



$$\mathcal{L}_i = p\{n_i, m_i | \alpha_i\}$$

k experiments

$$\text{Joint } \mathcal{L}: \mathcal{L}_{\text{joint}} = \prod_{j=1}^k \mathcal{L}_j$$

$$= p(n_1, m_1 | \alpha_1) p(n_2, m_2 | \alpha_2) \dots p(n_k, m_k | \alpha_k)$$

$$p(\underline{\alpha} | \underline{n}, \underline{m}) = \sum_{\underline{\alpha}} \prod_{j=1}^k p(\alpha_j | \delta_j, \eta_j) \left[\prod_{j=1}^k p(n_j, m_j) \right]$$

