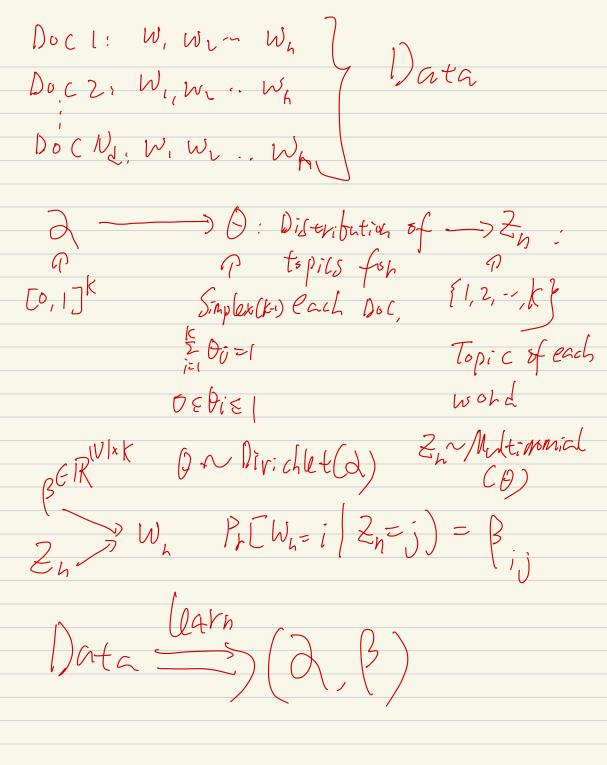
Data. {x, xz-, xh} XiERd (T, TI, --- TIK) ZII; = | P+[25=k]=TIK Xilzi=k~ Normal (Mk. Zk) Learn: (π, π, π, π_k) & $(\mu, \bar{\lambda})$, $(\mu_{\bar{\lambda}}, \bar{\lambda}_{\bar{\lambda}})$... $(\mu_{\bar{\lambda}}, \bar{\lambda}_{\bar{k}})$ D Expectation - Step: Posterior Pr[2n=k)
= Ynk Poster Chiorx likelihood Ynk = π_k . $N(X_h|M_k, \Sigma_k)$ K Yhk=1

K=1

Mormalization

Normal $\frac{1}{2} \frac{1}{2} \frac{1$ $\overline{Z_k} = \frac{1}{N_b} \sum_{n=1}^{N_b} \gamma_{nk} \left(\chi_{h} - \mathcal{U}_k \right) \left(\chi_{h} - \mathcal{U}_k \right)^T$ $\frac{1}{k} = \frac{N_k}{N}, \quad \frac{k}{p=1}$ Repeat E-step & M-Step whtil Convergence D.

(2) Meximilation-Step.



We ware to infer P(0,2/W, 2, B) Pirichler(Y) Multinomia KLEGHPJ=-EgElog(g)

Interch ($q(0|\gamma) \frac{h}{77} q(2|l)$) dod 2|d2 r d2 r