## LDA Model

$$p(\boldsymbol{W}, \boldsymbol{Z}, \boldsymbol{\Theta}) = \prod_{d=1}^{D} p(\boldsymbol{\theta}_d) \prod_{n=1}^{N_d} p(z_{dn} | \boldsymbol{\theta}_d) p(w_{dn} | z_{dn})$$

