

WILSON IS THIS PROBLETS SUPERCRITICM?

$$\mu > 1 \quad \mu = \mu N \quad : \quad \mu N > 1$$
$$\mu > 1/N$$

$$P_{\mu}(\mu > \frac{1}{N} | \text{data})$$

$$= \int_{1/N}^1 \pi(\mu | \text{data}) d\mu$$

$$= \frac{\int_{1/N}^1 \text{Beta}(\mu; \gamma + S, \gamma + \mu N - S) f(\mu) d\mu}{\int_0^1 \text{Beta}(\mu; \gamma + S, \gamma + \mu N - S) f(\mu) d\mu}$$