

 a_2

a3

a3

 a_4

 $log(q_{\theta}(z))$

$\arg \max_{q_{\theta} \in Q} H(q_{\theta}(z))$
s.t. $E_{z \sim q_{\theta}(z)} [f_{p,T}(z)] = \mu$

Depends on choice of model p(x|z) - e.g. **2D linear system** behavior T(x) - e.g. **band of oscillations**

$$f_{p,T}(z) = E_{x \sim p(x|z)} [T(x)]$$

$$\operatorname{e.g.} \ E_{p(x|z)}\left[T(x)\right] = \begin{bmatrix} \operatorname{real}(\lambda_1) \\ \frac{\operatorname{imag}(\lambda_1)}{2\pi} \\ \operatorname{real}(\lambda_1)^2 \\ \frac{\operatorname{imag}(\lambda_1)}{2\pi}^2 \end{bmatrix}$$

$$Iog(q_{\theta}(z))$$

$$\frac{imag(\lambda_1)}{2\pi}$$

