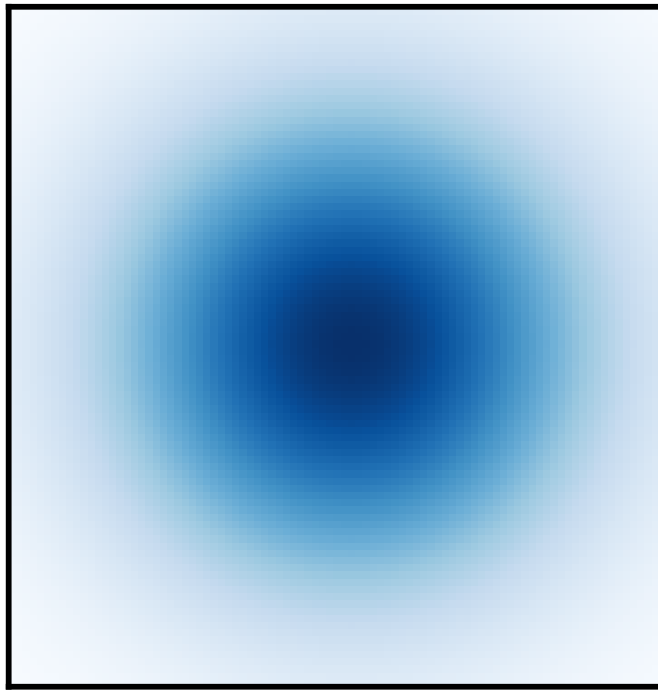
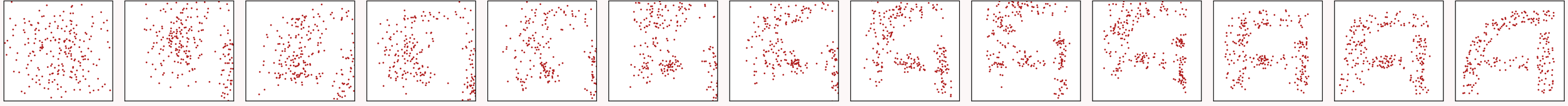
/66

55

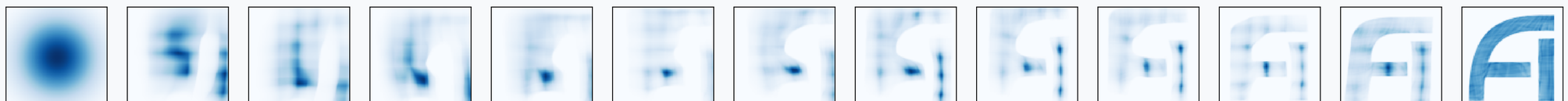
Normalizing flows

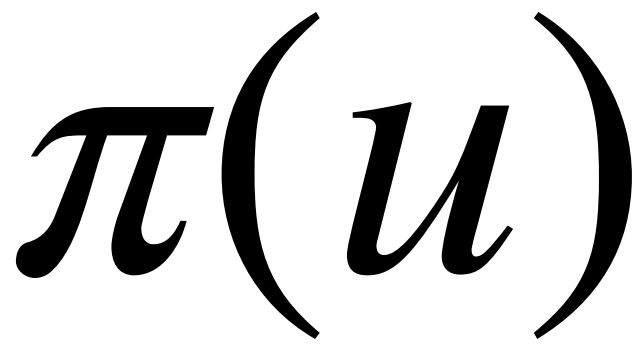


Efficient sampling: $\theta \sim \hat{p}(\theta)$

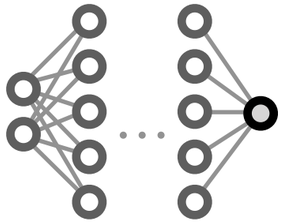


Efficient density estimation: $\log \hat{p}(\theta)$

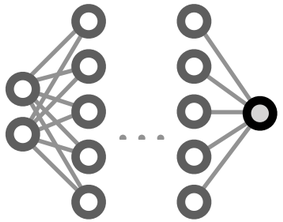



π(u)

Base density



$$\theta = f(u)$$



One-to-one transformation

Tractable f^{-1} and $\det \nabla f$

Target density

$$p(\theta) = \pi\left(f^{-1}(\theta)\right) \left|\det \nabla f\right|^{-1}$$

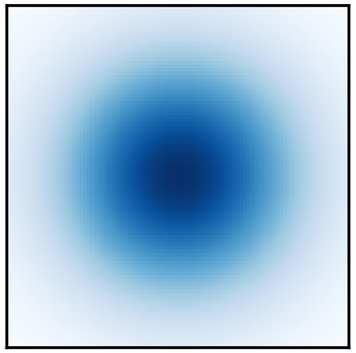
[Rezende & Mohamed 2015]


(IAIFI logo)

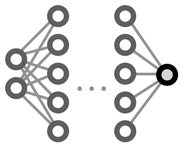
[Rezende & Mohamed 2015]

Normalizing flows

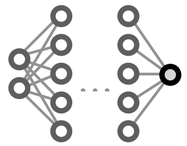
Base density



$\pi(u)$



$\theta = f(u)$



One-to-one transformation

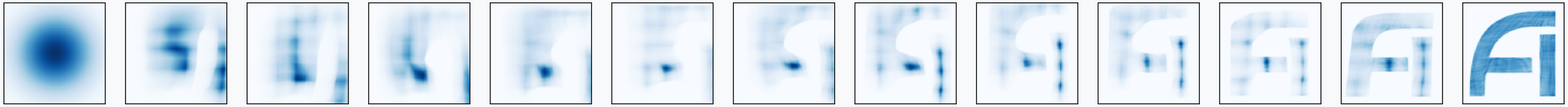
Tractable f^{-1} and $\det \nabla f$

(IAIFI logo)

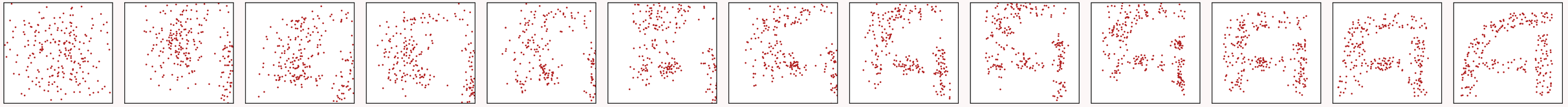
Target density

$$p(\theta) = \pi\left(f^{-1}(\theta)\right) \left|\det \nabla f\right|^{-1}$$

Efficient density estimation: $\log \hat{p}(\theta)$



Efficient sampling: $\theta \sim \hat{p}(\theta)$



Normalizing flows