

$$\underset{\mathbf{x}}{\operatorname{argmin}} \frac{1}{2} ||A\mathbf{x} - \mathbf{d}||_{2}^{2} + \log R(\mathbf{x})$$

Reparametrize optimization with trained generative network

$$\mathbf{x} = G_{\theta}(\mathbf{z})$$



$$\underset{\mathbf{x}}{\operatorname{argmin}} \frac{1}{2} ||A\mathbf{x} - \mathbf{d}||_{2}^{2} + \log R(\mathbf{x})$$

Reparametrize optimization with trained generative network

$$\mathbf{x} = G_{\theta}(\mathbf{z})$$

Data misfit becomes
$$||A\mathbf{x} - \mathbf{d}||_2 = ||AG_{\theta}(\mathbf{z}) - \mathbf{d}||_2$$