



$$\begin{aligned}
 & \text{Observed Image} = A \underbrace{\text{True Galaxy}} + \text{Noise} \\
 & x \sim p(x) \\
 & \eta \sim \mathcal{N}(0, \Sigma_n) \\
 & y = Ax + \eta
 \end{aligned}$$

How galaxies look like! - **Prior**

$$p(x|y) \propto \underbrace{p(y|x)p(x)}_{\text{Likelihood - Noise model!}}$$

Likelihood - Noise model!

Iterative Update of Score-Based Priors for Inverse Imaging in Strong Gravitational Lenses

Gabriel Missael Barco. May 8, 2024. CRAQ Annual Scientific Meeting
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