

Figure 1: Polynomial curve fitting models in PRML: (a) Least Square Estimation in §1.1; (b) Maximum Likelihood Estimation (point estimation) in §2.5; (c) Maximum-a-Posteriori estimation (point estimation) in §2.5 and full bayesian approach in §2.6

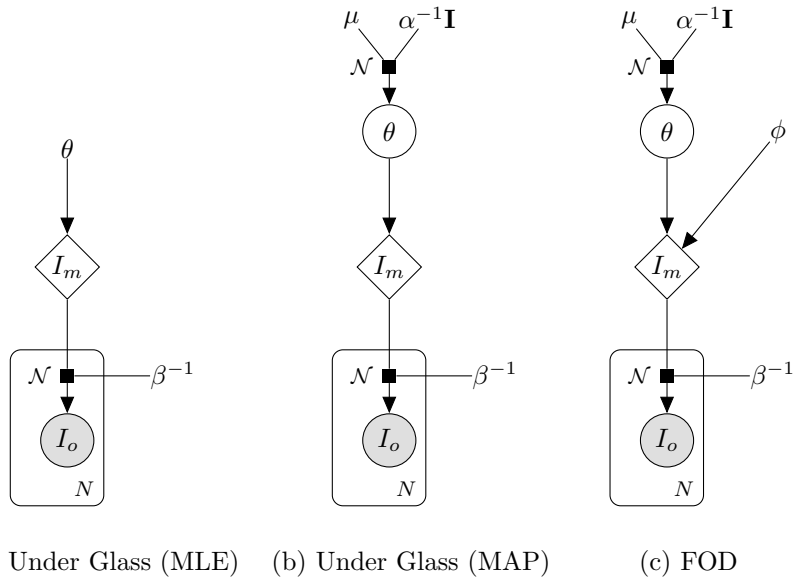


Figure 2: MAPIS models: $\theta = \{\text{pitch, angle, tlx, tly}\}$, $\alpha^{-1}\mathbf{I}$ is the covariance matrix for θ ; I_m is the image generated by the model (it's supposed that the number of columns and rows of pinholes are known); I_o are captured images by sensor; β^{-1} is the variance of Gaussian noise added to each pixel of I_m (due to sensor noise and other effects). (a) MLE point estimation for θ ; (b) MAP point estimation for θ ; (c) Adding $\phi = \{?\}$ as the cause for biased noise due to reflections...