Models

Justin Salmon[1] and George Lancaster[2]

[1] *wr18313*
[2] *qv18258*

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1 The Prior

Q1: Most probabilistic processes in nature tend to follow Gaussian distributions, hence this is generally a good place to start.

Noise in input data - assume noise is gaussian -> implies gaussian likelihood

Q2; Equally likely to deviate from the mean in all directions. Again a good place to start

Q3: The covariance matrix would not be in terms of the identity matrix (for some reason). We would have non-zero values in the offset diagonals which correspond to the correlations between different things.

Q5: Euclidean distance

2 Posterior

$$f \sim \mathcal{N}\left(\mathbf{0}, \beta^{-1}\mathbf{I}\right) \tag{1}$$

$$\beta \sim \Gamma(a) \tag{2}$$

3 Evidence