



$$\phi(\mathbf{x}): R^D \rightarrow R^M$$

$$\left\{ \begin{array}{l} k(\mathbf{x}, \mathbf{y}) = \phi(\mathbf{x})^T \frac{\sigma_p^2}{M} \phi(\mathbf{y}) \\ f \sim GP(0, k) \\ y \sim N(0, \sigma_n^2) \end{array} \right.$$