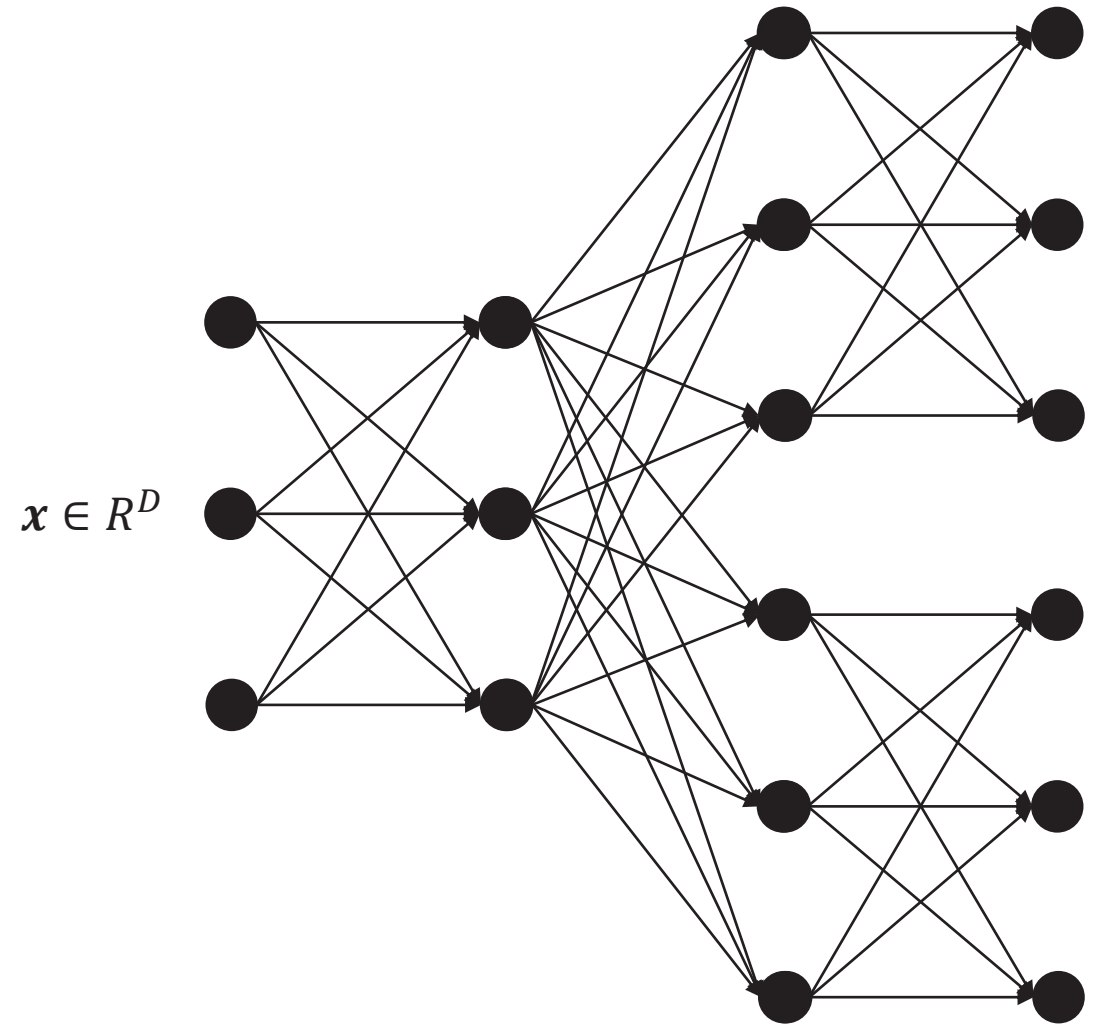

$$\phi_1(\boldsymbol{x}): R^D \rightarrow R^{M_1}$$

$$\begin{cases} k_1(\boldsymbol{x}, \boldsymbol{y}) = \phi_1(\boldsymbol{x}) \dfrac{\sigma_p^2}{M_1} \phi_1(\boldsymbol{y}) \\ f_1 \sim GP(0, k_1) \\ y_1 \sim N(0, \sigma_{n,1}^2) \end{cases}$$

$$\phi_2(\boldsymbol{x}): R^D \rightarrow R^{M_2}$$

$$\begin{cases} k_2(\boldsymbol{x}, \boldsymbol{y}) = \phi_2(\boldsymbol{x}) \dfrac{\sigma_p^2}{M_2} \phi_2(\boldsymbol{y}) \\ f_2 \sim GP(0, k_2) \\ y_2 \sim N(0, \sigma_{n,2}^2) \end{cases}$$