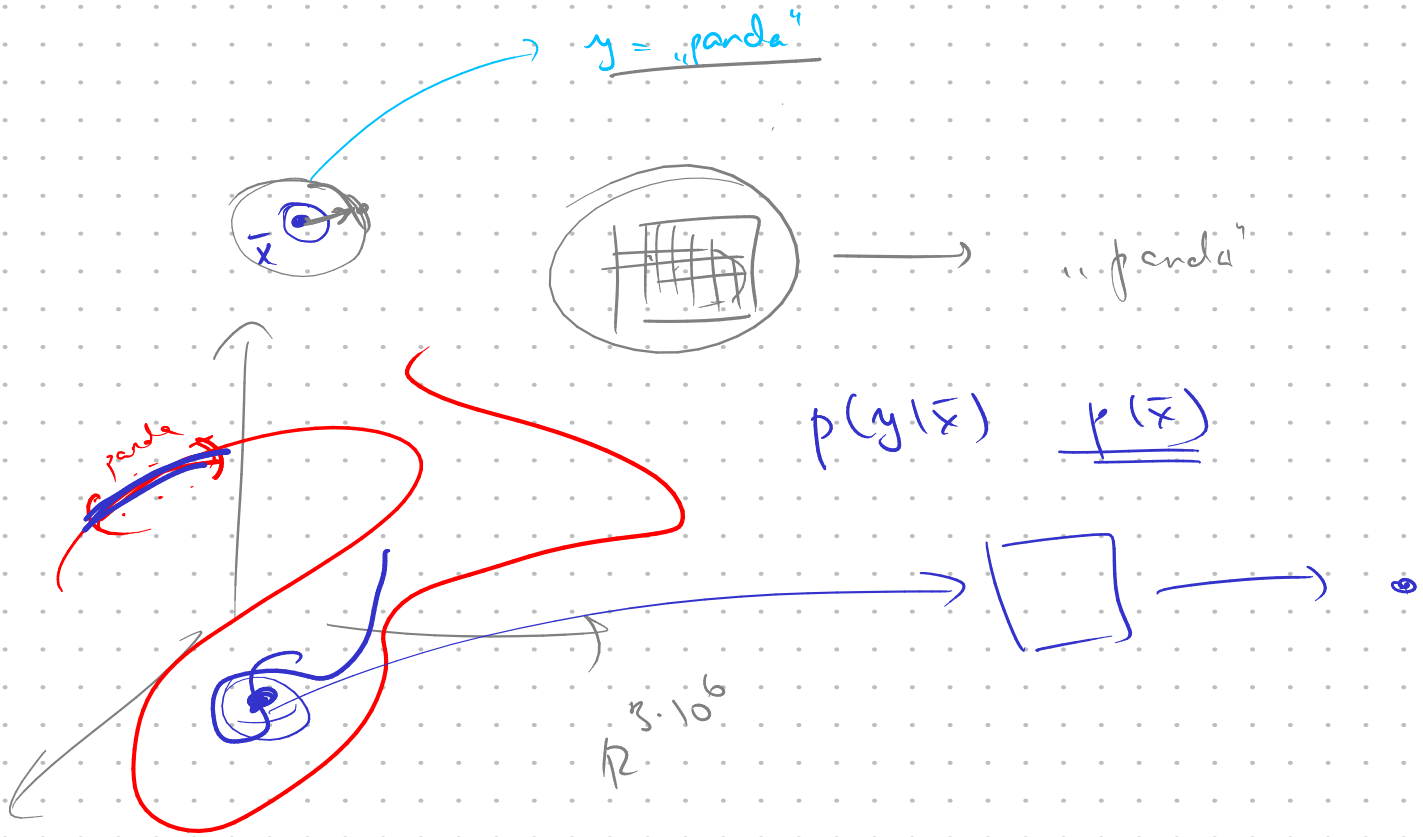

$$p(\theta|D) = \frac{p(D|\theta) \cdot p(\theta)}{p(D)}$$

$$p(\bar{x}|D) = \int p(\bar{x}|\bar{\theta})\, p(\bar{\theta}|D)\, d\bar{\theta}$$

$$p(\bar{w}|D) = \mathcal{N}(\bar{w}|\bar{\mu}_N, \Sigma_N)$$

$$\bar{x} \longmapsto \hat{y} = \bar{\mu}_N^T \bar{x}, \quad \sigma^2$$

predictive distr. $p(y|D) = \dots = \mathcal{N}(y|\bar{\mu}_N^T \bar{x}, \sigma^2 + \bar{x}^T \Sigma_N \bar{x})$