

# Analýza funkcionálních dat v praxi

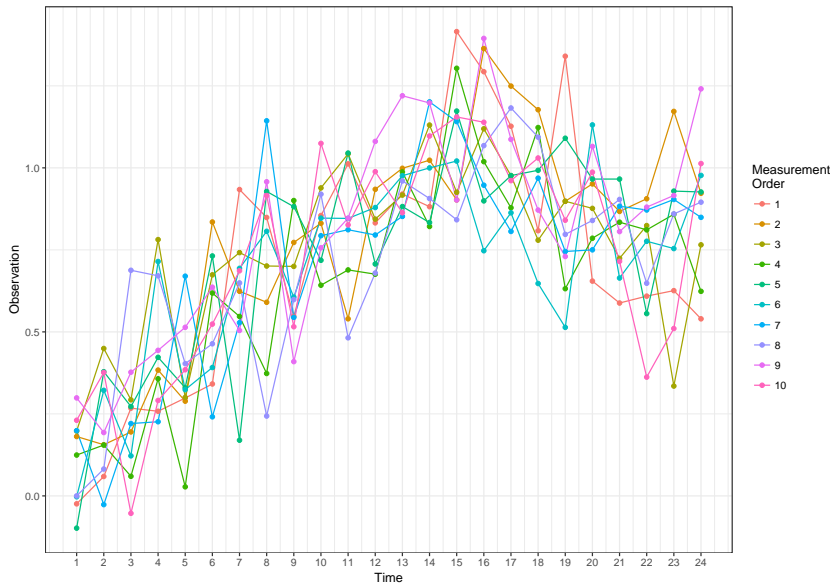
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# Motivace



## 1 Nadaraya – Watson

$$W_i^{NW}(x, h) = \frac{K_h(x_i - x)}{\sum_{i=1}^n K_h(x_i - x)}$$

## 2 lokálně – lineární

$$W_i^{LL}(x, h) = \frac{\{\hat{s}_2(x, h) - \hat{s}_1(x, h)(x_i - x)\}K_h(x_i - x)}{n(\hat{s}_2(x, h)\hat{s}_0(x, h) - \hat{s}_1(x, h)^2)},$$

kde

$$\hat{s}_r(x, h) = \frac{1}{n} \sum_{i=1}^n (x_i - x)^r K_h(x_i - x)$$

## 3 Priestley – Chao

$$W_i^{PCH}(x, h) = \frac{1}{n} K_h(x_i - x)$$

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