



$k=1, \dots, N$

$$\sum_{k=1}^N w_k (\theta_k - \theta)^2 \rightarrow \min_{\theta}$$

WAZIONE
N.K.

$$\frac{\delta \sum_{k=1}^N w_k (\theta_k - \theta)^2}{\delta \theta} = -2 \cdot \sum_{k=1}^N w_k (\theta_k - \theta) = 0 \quad | : (-2)$$

$$\sum_{k=1}^N w_k (\theta_k - \theta) = 0$$

$$\sum_{k=1}^N w_k \theta_k = \sum_{k=1}^N \theta w_k = N\theta$$

$$\theta = \frac{1}{N} \sum_{k=1}^N \theta_k$$

$$\sum_{k=1}^N w_k \theta_k = \theta \sum_{k=1}^N w_k$$

ŚREDNIA
WAGOWA

$$\theta = \frac{\sum_{k=1}^N w_k \theta_k}{\sum_{k=1}^N w_k}$$