$$n_{eff} = \frac{\left(\sum_{n=1}^{N} w_i\right)^2}{\sum_{n=1}^{N} w_i^2}$$

$$C_{P,res} = C_P - C_{P,ig}$$

$$\hat{Z}(x_0) = \sum_{i=1}^{N} w_i(x_0) \times Z(x_i) \tag{1}$$

$$\underset{W}{\text{minimize}} \quad W^T \cdot \text{Var}_{x_i} \cdot W - \text{Cov}_{x_i x_0}^T \cdot W - W^T \cdot \text{Cov}_{x_i x_0} + \text{Var}_{x_0} \tag{2}$$

$$\text{subject to} \quad \mathbf{1}^T \cdot W = 1 \tag{3}$$