

$$\Sigma^{(k+1)} \leftarrow \sum_{i=1}^N \hat{f}(\mathbf{z}_i) \left(\mathbf{z}_i - \boldsymbol{\mu}^{(k+1)} \right) \left(\mathbf{z}_i - \boldsymbol{\mu}^{(k+1)} \right)^{\top}$$