$$\boldsymbol{\mu}^{(k+1)} \leftarrow \sum_{i=1}^{N} \hat{f}(\mathbf{z}_i)\mathbf{z}_i \ ,$$

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