repeat until convergence:

 $\begin{aligned} &\text{for } i = 1 \text{ to } n: \\ &\gamma_{\lambda_k,i}^* \leftarrow \operatorname{argmin}_{\gamma} \big[\|\bar{q} - c_i^*(q_i \circ \gamma)\|^2 + \lambda_k \mathcal{R}(\gamma) \big] \text{ via Dynamic Programming} \\ &f_i^* \leftarrow \tilde{f}_{\lambda_{k-1},i} \circ \gamma_{\lambda_k,i}^* \text{ , } &q_i^* \leftarrow \mathtt{srvf}(f_i^*) \text{ , } &c_i^* \leftarrow \frac{\langle \bar{q}, \ q_i^* \rangle}{\langle q_i^*, \ q_i^* \rangle} \end{aligned}$

end

$$egin{aligned} ar{q}^* \leftarrow rac{1}{n} \sum q_i^*, & \epsilon \leftarrow \|ar{q} - ar{q}^*\|^2 \ \mathbf{if} \ \epsilon > tol : ar{q} \leftarrow ar{q}^* \end{aligned} egin{aligned} & convergence \ check \end{aligned}$$

end repeat