

$$\cdots + \overbrace{\|\mathbf{y}_i - \mathcal{H}(\mathbf{x}_i^f)\|_{\mathbf{R}_i^{-1}}^2} + \overbrace{\|\mathbf{x}_{i+1}^f - \mathcal{M}_i(\mathbf{x}_i^a)\|_{\mathbf{Q}_i^{-1}}^2} + \cdots$$