

$$D_{\mathrm{M}}(\mathbf{x}(t)) \coloneqq (\mathbf{x}(t) - \boldsymbol{\mu}_{\mathrm{RS}})^{\mathsf{T}} \Lambda_{\mathrm{RS}}(\mathbf{x}(t) - \boldsymbol{\mu}_{\mathrm{RS}}).$$