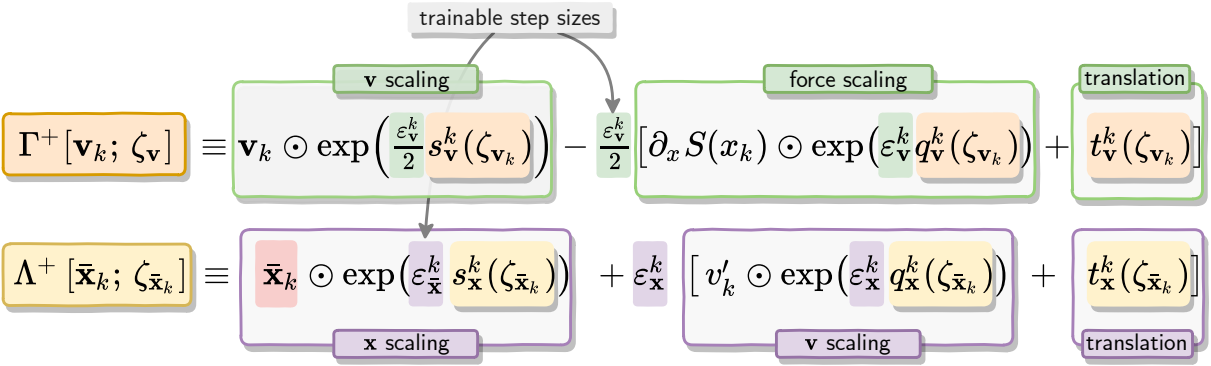
trainable step sizes
v scaling
force scaling
translation
$\Gamma^+[\mathbf{v}_k;\,\zeta_{\mathbf{v}}] \equiv \mathbf{v}_k \odot \exp\left(\frac{\varepsilon_{\mathbf{v}}^k}{2} s_{\mathbf{v}}^k(\zeta_{\mathbf{v}_k})\right) - \frac{\varepsilon_{\mathbf{v}}^k}{2}\left[\partial_x S(x_k) \odot \exp\left(\varepsilon_{\mathbf{v}}^k q_{\mathbf{v}}^k(\zeta_{\mathbf{v}_k})\right) + t_{\mathbf{v}}^k(\zeta_{\mathbf{v}_k})\right]$
$\Lambda^+[\bar{\mathbf{x}}_k;\,\zeta_{\bar{\mathbf{x}}_k}] \equiv \bar{\mathbf{x}}_k \odot \exp\left(\varepsilon_{\bar{\mathbf{x}}}^k s_{\mathbf{x}}^k(\zeta_{\bar{\mathbf{x}}_k})\right) + \varepsilon_{\mathbf{x}}^k\left[v'_k \odot \exp\left(\varepsilon_{\mathbf{x}}^k q_{\mathbf{x}}^k(\zeta_{\bar{\mathbf{x}}_k})\right) + t_{\mathbf{x}}^k(\zeta_{\bar{\mathbf{x}}_k})\right]$
x scaling
v scaling
translation