c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1

$$\hat{H}c1c1\hat{H}c1c1_{\mathrm{S}}c1c1\hat{H}c1c1_{\mathrm{E}}c1c1\hat{H}c1c1_{\mathrm{SE}}c1c1 \tag{1}$$

c 1 c 1 $\hat{H}_{\mathrm{E}}$ c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c
1 c 1 c 1 c 1 c 1 c 1 $\hat{H}_{\mathrm{S}} = \Omega \mathbf{h} \cdot \hat{\boldsymbol{\sigma}}$ c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1
c 1 c 1

$$\hat{H}_{\mathrm{SE}} = \chi(t)\boldsymbol{\alpha} \cdot \hat{\boldsymbol{\sigma}} \otimes \hat{O}. \tag{2}$$

c 1 c 1 $\mathbf{h} \cdot \hat{\boldsymbol{\sigma}}$ c 1 c 1 $\boldsymbol{\alpha} \cdot \hat{\boldsymbol{\sigma}}$ c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 $\mathbf{h}$ c 1
c 1 $\boldsymbol{\alpha}$ c 1 c 1 c 1 c 1 $\hat{O}$ c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c
1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c
1 c 1 c 1 c 1 c 1

c 1 c 1 $\chi(t)$ c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c 1 c
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