



## Development and Applications of Coupled- Cluster Methods for X-Ray Spectroscopy

Vidal, Marta Lopez

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# Author Corrections

| Page | Current Text   | New Text  |
|------|--|---|
| 6    | $\hat{f}_i = [\dots] = -\frac{1}{2}\sum_i^N \nabla_i^2 - \sum_A^N \frac{Z_A}{r_{iA}} + v^{\text{HF}}(i)$   | $\hat{f}_i = [\dots] = -\frac{1}{2}\nabla_i^2 - \sum_A^N \frac{Z_A}{r_{iA}} + v^{\text{HF}}(i)$   |
| 15   | [...] and inserting it into the similarity-transformed normal-ordered Hamiltonian $\hat{\mathcal{H}} = e^{-\hat{T}}\hat{\mathcal{H}}e^{-\hat{T}}$ .                      | [...] and inserting it into the similarity-transformed normal-ordered Hamiltonian $\hat{\mathcal{H}}$ .   |
| 22   | $[\hat{\mathcal{H}}, \hat{\mathcal{R}}]  \Psi_i\rangle = \omega_f \hat{\mathcal{R}}  \Psi_i\rangle$  | $[\hat{\mathcal{H}}, \hat{\mathcal{R}}]  \Phi_0\rangle = \omega_f \hat{\mathcal{R}}  \Phi_0\rangle$   |
| 28   | $\gamma_q^p = \langle \Phi_0   \hat{\mathcal{L}} e^{\hat{T}^\dagger} \hat{a}_p^\dagger \hat{a}_q e^{\hat{T}} \hat{\mathcal{R}}   \Phi_0 \rangle_C$                       | $\gamma_q^p = \langle \Phi_0   \hat{\mathcal{L}} e^{-\hat{T}} \hat{a}_p^\dagger \hat{a}_q e^{\hat{T}} \hat{\mathcal{R}}   \Phi_0 \rangle_C$   |
| 28   | $(\gamma_{\mathcal{N}})_q^p = \langle \Phi_0   \hat{\mathcal{L}} e^{\hat{T}^\dagger} \{ \hat{a}_p^\dagger \hat{a}_q \} e^{\hat{T}} \hat{\mathcal{R}}   \Phi_0 \rangle_C$ | $(\gamma_{\mathcal{N}})_q^p = \langle \Phi_0   \hat{\mathcal{L}} e^{-\hat{T}} \{ \hat{a}_p^\dagger \hat{a}_q \} e^{\hat{T}} \hat{\mathcal{R}}   \Phi_0 \rangle_C$   |
| 28   | $(\gamma_{\mathcal{N}})_i^a = t_i^a + r_0 l_i^a + r_0 t_{im}^{ae} l_e^m [\dots]$   | $(\gamma_{\mathcal{N}})_i^a = t_i^a + r_0 t_{im}^{ae} l_e^m [\dots]$  |
| 38   | In the Coulomb gauge,  | In the Coulomb gauge, the coupling Hamiltonian contains then two terms; the dominant perturbative term describing one-photon absorption or emission of a particle of charge $-e$ and mass $m$ is given in Gauss units by: |
| 46   | The CVS approximation [110] states that [...]  | The CVS approximation states that [...]   |
| 223  | reduced Planck constant $\hbar = 1.0546 \times 10^{-34}$ J   | reduced Planck constant $\hbar = 1.0546 \times 10^{-34}$ J.s  |