

Erratum: Dipole Induced Transparency in drop-filter cavity-waveguide systems

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Equations 3 and 4 should be corrected as follows:

$$\hat{\mathbf{a}}_{out} = \frac{-\gamma\hat{\mathbf{c}}_{in} + \left(-i\Delta\omega + \frac{\kappa}{2} + \frac{g^2}{-i(\Delta\omega-\delta)+1/2\tau}\right)\hat{\mathbf{a}}_{in} - \sqrt{\kappa\gamma}\hat{\mathbf{e}}_{in}}{-i\Delta\omega + \gamma + \kappa/2 + \frac{g^2}{-i(\Delta\omega-\delta)+1/2\tau}} \quad (1)$$

$$\hat{\mathbf{c}}_{out} = \frac{-\gamma\hat{\mathbf{a}}_{in} + \left(-i\Delta\omega + \frac{\kappa}{2} + \frac{g^2}{-i(\Delta\omega-\delta)+1/2\tau}\right)\hat{\mathbf{c}}_{in} - \sqrt{\kappa\gamma}\hat{\mathbf{e}}_{in}}{-i\Delta\omega + \gamma + \kappa/2 + \frac{g^2}{-i(\Delta\omega-\delta)+1/2\tau}} \quad (2)$$

The operator $\hat{\mathbf{e}}_{in}$ is the creation operator for an input photon originating from leaky modes. It is related to $\hat{\mathbf{e}}_{out}$ in Fig. 1 by $\hat{\mathbf{e}}_{in} + \hat{\mathbf{e}}_{out} = \sqrt{\kappa}\hat{\mathbf{b}}$. The transmission amplitude and phase T_c and Φ_c , originally defined in the bottom of page 2, should be corrected to the proper form of $\hat{\mathbf{c}}_{out}/\hat{\mathbf{a}}_{in} = \sqrt{T_C}e^{i\Phi_c}$.

The mistakes in the original paper are purely typographical in nature. All calculations were performed using the correct equations, and no plots or figures are affected by the changes noted in this erratum.