

TABLE II. Dependence of the cross-section ratio  $\sigma(\theta, \phi)/\bar{\sigma}$  for electron capture in  $\text{H}^+ + \text{H}_2$  collision.  $\bar{\sigma}$  is the averaged total capture cross section. The calculated cross section does not depend on  $\phi$ .

$E_{\text{lab}}$ (keV/amu)	$\theta=0^\circ$	$\theta=30^\circ$	$\sigma(\theta, \phi)/\bar{\sigma}$ $\theta=45^\circ$	$\theta=60^\circ$	$\theta=90^\circ$	$\bar{\sigma}$ ( $10^{-16}$ cm $^2$ )
1	0.090	0.095	0.098	0.10	0.11	8.13
10	0.079	0.082	0.084	0.086	0.088	6.80
25	0.083	0.086	0.088	0.090	0.091	4.33
50	0.064	0.067	0.070	0.073	0.076	1.89
100	0.054	0.059	0.065	0.070	0.075	0.35
150	0.047	0.059	0.071	0.083	0.094	0.09
175	0.042	0.056	0.070	0.084	0.098	0.05
200	0.036	0.052	0.069	0.086	0.100	0.029
250	0.027	0.047	0.067	0.089	0.110	0.011
300	0.017	0.038	0.062	0.086	0.114	0.005
400	0.0043	0.028	0.054	0.085	0.120	0.0013

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### Erratum: Inhibition of atomic phase decays by squeezed light in a microscopic Fabry-Pérot cavity [Phys. Rev. A 40, 3796 (1989)]

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The following points in our article require clarification and correction.

(i) The equations of motion given in Sec. II assume that the transition dipole moment  $\mu_{21}$  is real, whereas the calculations of Sec. IV have been generalized to allow for complex  $\mu_{21}$ .

(ii) In the description of the squeezed vacuum input, the Kronecker delta  $\delta_{s,s'}$  should be removed from the definitions (4.5). The corrected equations are

$$\begin{aligned} \langle a_{\mathbf{k}s}^\dagger a_{\mathbf{k}'s'} \rangle &= N(k-K) \alpha_s^*(\mathbf{k}) \alpha_{s'}(\mathbf{k}') \delta_{k,k'}, \\ \langle a_{\mathbf{k}s} a_{\mathbf{k}'s'} \rangle &= M(k-K) \alpha_s(\mathbf{k}) \alpha_{s'}(\mathbf{k}') \delta_{k,2K-k'}. \end{aligned} \quad (4.5)$$

This alters some of the expressions that follow, in particular, Eq. (4.11) becomes

$$\begin{aligned} \langle \beta_Y(t) \beta_Y(t') \rangle &= -\frac{V}{(2\pi)^3} \frac{\hbar c}{2} \sum_{s,s'} \int_0^{2K} dk k^2 [k(2K-k)]^{1/2} e^{-ic(k-K)(t-t')} M(k-K) \\ &\quad \times \int_{\Omega_{\text{sq}}} d\Omega_k \int_{\Omega_{\text{sq}}} d\Omega_{k'} \alpha_s(\mathbf{k}) [\mu_{21} \cdot \mathbf{f}_{\mathbf{k}s}(\mathbf{h})] \alpha_{s'}((2K-k)\hat{\mathbf{k}}') [\mu_{21} \cdot \mathbf{f}_{(2K-k)\hat{\mathbf{k}}'}(\mathbf{h})] + \text{c.c.} \\ &+ \frac{V}{(2\pi)^3} \frac{\hbar c}{2} \sum_{s,s'} \int_0^\infty dk k^3 e^{ic(k-K)(t-t')} N(k-K) \\ &\quad \times \int_{\Omega_{\text{sq}}} d\Omega_k \int_{\Omega_{\text{sq}}} d\Omega_{k'} \alpha_s^*(\mathbf{k}) [\mu_{21}^* \cdot \mathbf{f}_{\mathbf{k}s}^*(\mathbf{h})] \alpha_{s'}(k\hat{\mathbf{k}}') [\mu_{21} \cdot \mathbf{f}_{k\hat{\mathbf{k}}'}(\mathbf{h})] + \text{c.c.} \\ &+ \frac{V}{(2\pi)^3} \frac{\hbar c}{2} \int_0^\infty dk k^3 e^{-ic(k-K)(t-t')} \int_{\text{half-sphere}} d\Omega_k \sum_s |\mu_{21} \cdot \mathbf{f}_{\mathbf{k}s}(\mathbf{h})|^2, \end{aligned} \quad (4.11)$$

and the final result, Eq. (4.18), should be replaced by

$$\begin{aligned} \langle \beta_Y(k) \beta_Y(k') \rangle / \delta(k+k') &= \frac{\hbar \mu_{21}^2 K^3}{2\pi^2} (N-M) \frac{1+R}{1-R} \frac{1}{\mathcal{N}'} \left[ \int_{\cos\theta_2}^1 du (1+u^2) \frac{\sin^2(Kh_z u)}{1+F \sin^2(KLu)} J_0(Kh_x(1-u^2)^{1/2}) \right]^2 \\ &+ \frac{\hbar \mu_{21}^2 K^3}{4\pi^2} \frac{1+R}{1-R} \int_0^1 du (1+u^2) \frac{\sin^2(Kh_z u)}{1+F \sin^2(KLu)} \\ &= \frac{\hbar \mu_{21}^2 K^3}{6\pi^2} B(\mathbf{h}). \end{aligned} \quad (4.18)$$

However, because the Airy function of the cavity is so sharply peaked around  $u=1$ , these changes have no significant effect on any of the numerical results presented thereafter, and our descriptions and conclusions remain the same.

We thank Z. Ficek for pointing out the error in Eq. (4.5).

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