
ERRATA

DOUBLE IONIZATION OF HELIUM BY PROTONS AND ELECTRONS AT HIGH VELOCITIES. J. H. McGuire [Phys. Rev. Lett. 49, 1153 (1982)].

In Ref. 10 "single ionization" should be "the ratio of double to single ionization." The SO limit shown in Fig. 1 for protons and electrons is an order of magnitude smaller than the photon limit given by Byron and Jochain (Ref. 11). We suggest that this may be due to final-state correlation effects in the double (not single) ionization cross sections.

TRANSVERSE ELECTROMAGNETIC WAVES WITH FINITE ENERGY, ACTION, AND $\int \vec{E} \cdot \vec{B} d^4x$. Avinash Khare and Trilochan Pradhan [Phys. Rev. Lett. 49, 1227, 1594(E) (1982)].

The choice $\vec{k} = (k/\sqrt{3})(1, 1, 1)$ made in our paper is not proper as it corresponds to having $C_{\vec{k}} = C_k \times \delta(\cos\theta_k - 1/\sqrt{3})\delta(\varphi_k - \pi/4)$ in the expression for $\vec{A}(\vec{x}, t)$ which in turn leads to infinite q , s , and E , all of which diverge as $\delta^2(0)$. However, this error can be easily rectified if instead of our original choice we have

$$\vec{A}(\vec{x}, t) = \int d^3k \frac{C_k}{2^{5/2}\pi^2} [\vec{a}(\vec{k})\sin\vec{k} \cdot \vec{x} + \vec{b}(\vec{k})\cos\vec{k} \cdot \vec{x}] \cos(kt + \alpha),$$

where \vec{k} is not restricted to a single direction and

$$\vec{k} \cdot \vec{a}(\vec{k}) = \vec{k} \cdot \vec{b}(\vec{k}) = 0, \quad \vec{a}(-\vec{k}) = -\vec{a}(\vec{k}), \quad \vec{b}(-\vec{k}) = \vec{b}(\vec{k}), \quad \vec{a}^2(\vec{k}) = \vec{b}^2(\vec{k}) = 1, \quad \vec{k} \cdot [\vec{a}(\vec{k}) \times \vec{b}(\vec{k})] = k.$$

With this choice expressions for q , s , and E are all finite and identical to those given in Eqs. (15a) to (15c) of our paper. With this choice the expression for $\vec{A}(\vec{x}, t)$ as given in Eq. (16) is no longer valid and also E_i is not parallel to B_i . We do not know if this solution is nonsingular or not. We are grateful to S. Malinowski and K. R. Brownstein for pointing out that q , s , and E are all divergent for the choice $\vec{k} = (k/\sqrt{3})(1, 1, 1)$.

CHAOS IN THE SEMICLASSICAL N -ATOM JAYNES-CUMMINGS MODEL: FAILURE OF THE ROTATING-WAVE APPROXIMATION. P. W. Milonni, J. R. Ackerhalt, and H. W. Galbraith [Phys. Rev. Lett. 50, 966 (1983)].

Since our paper was published we learned that the same model was studied by P. I. Belobrov, G. M. Zaslavskii, and G. Kh. Tartakovskii, Zh. Eksp. Teor. Fiz. 71, 1799 (1977) [Sov. Phys. JETP 44, 945 (1977)]. The approaches in the two papers are somewhat different, but the conclusions are essentially the same. We regret that the Russian paper was not cited in ours, and thank Dr. Belobrov for bringing it to our attention.