Atom Optics — Erratum

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(Dated: October 26, 2001)

The following misprints have been brought to my attention. I would very much appreciate your help in identifying further mistakes. Please communicate them to me at pierre.meystre@optics.arizona.edu

Chapter 1 — Light Forces on Atoms

In Eqs. (1.32)-(1.33), $\hbar\Omega(\mathbf{r})$ should read $\Omega(\mathbf{r})$.
(*Found by Henning Christ*)

Chapter 6 — Collisions

Equation (6.12) should read:

$$\mathcal{H}_f = \frac{\epsilon_0}{2} \int d^3r \left[\frac{\hat{\mathbf{D}}^2(\mathbf{r})}{\epsilon_0^2} + c^2 \hat{\mathbf{B}}^2(\mathbf{r}) \right].$$

(*Found by Iwo Bialynicki-Birula*)

In Eqs. (6.36) and (6.39), all δ-functions should read $\delta(c|k| - \omega_a)$ and $\delta(c|k| - \omega_0)$, respectively.
Also, Eq. (6.40) should read:

$$\Gamma_2(x) = \Gamma \int_0^\infty d\omega \frac{\omega}{\omega_0} \delta(\omega - \omega_0) \cos\left(\frac{\omega x}{c} \right) = \Gamma \cos(k_0 x).$$

(*Found by Han Pu*)

Chapter 10 — Bose-Einstein condensation

Page 178, last line of text, replace "equation (10.4)" by "equation (10.46)".
(*Found by Kunal Das*)

Chapter 12 — Nonlinear wave mixing

In equation (12.1), first line, the Kronecker δ's should read δ_{ja} and δ_{jb} instead of δ_{ia} and δ_{ib}.
(*Found by Kunal Das*)