Errata for The Feynman Lectures on Physics Volume II New Millennium (3rd printing)

The errors in this list appear in the 3rd printing of *The Feynman Lectures on Physics: New Millennium Edition* (2011) and earlier printings and editions; these errors have been corrected in the 4th hardback printing of the *New Millennium Edition* (2011).

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Global change: coulomb->Coulomb

Coulomb, wherever used as a proper name (and not a unit of charge) should be capitalized, as in the following cases, where it is currently not capitalized:

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5-5 "the coulomb force"

Global change: ac/dc->AC/DC

The abbreviations for alternating and direct current should be AC/DC (small caps) throughout.

II:7-8, par 1

We turn to another phenomenon in which the locations of charges is governed by a potential that arises in part from the same charges.

Grammatical error ('charges is' vs 'charges are')

We turn to another phenomenon in which the locations of charges are governed by a potential that arises in part from the same charges.

II:17-14, par 2

This, however, will not work, because in integrating around the two coils, the denominator r_{12} of the integrand will go to zero when the two line elements are at the same point.

Confusing wording: Here we are not integrating around "two coils," but rather, doubly-integrating around *one* coil. (It is also not what Feynman said.)

This, however, will not work, because the denominator r_{12} of the integrand will go to zero when the two line elements $d\mathbf{s}_1$ and $d\mathbf{s}_2$ are at the same point on the coil.

II:39-5, Eq 39.19

$$C_{xxxx} = C_{xxyy} + C_{xyxy} \tag{39.19}$$

This equation for the tensor of elasticity of an isotropic material is incorrect. See, for example, http://en.wikiversity.org/wiki/Introduction to Elasticity/Constitutive relations#Isotropic materials.

$$C_{xxxx} = C_{xxyy} + 2C_{xxxy} \tag{39.19}$$

II:39-6, Eqs 39.21 (2nd Eq)

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$$C_{xyxy} = 2\mu, \tag{39.21}$$

This equation for the tensor of elasticity of an isotropic material is incorrect. See, for example, http://en.wikiversity.org/wiki/Introduction to Elasticity/Constitutive relations#Isotropic materials.

$$C_{xyxy} = \mu, \tag{39.21}$$

II:39-6, Eqs 39.22 (3rd Eq)

...,
$$C_{xyxy} = \frac{Y}{1+\sigma}.$$
(39.22)

This equation for the tensor of elasticity of an isotropic material is incorrect. See, for example, http://en.wikiversity.org/wiki/Introduction to Elasticity/Constitutive relations#Isotropic materials.

 $C_{xyxy} = \frac{Y}{2(1+\sigma)}.$

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