Errata
Introduction to the Physics of Highly Charged Ions

Heinrich F Beyer
Viatcheslav P Shevelko

Errata

Page 79 after eq. (3.32)
written: frequency $\omega = 4\pi Rc/n^3$
should be: frequency $\omega = 4\pi R_H c/n^3$

Page 82 3rd line from bottom:
written: radii r and dr
should be: radii r and $r + dr$

Page 83 after eq. (3.50)
written: distributions of excited
should be: distributions $r^2 R_{n\ell}^2$ of excited

Page 84 eq. (3.53)
written:

$$\int_0^{2\pi} \int_0^{\pi} Y_{\ell' m'}^*(\theta, \varphi) Y_{\ell m}(\theta, \varphi) \sin\theta \, \mathrm{d}\theta \, \mathrm{d}\varphi = \delta_{\ell\ell'} \delta m m'$$

should be:

$$\int_0^{2\pi} \int_0^{\pi} Y_{\ell' m'}^*(\theta, \varphi) Y_{\ell m}(\theta, \varphi) \sin\theta \, \mathrm{d}\theta \, \mathrm{d}\varphi = \delta_{\ell\ell'} \delta_{mm'}$$

Page 128 1st para:
written: Lorentz and Livingston
should be: Lawrence and Livingston

Page 189 eq. (5.50):
written:

$$\mathrm{A}(n) = \frac{8\mathrm{A}_0}{3} Z_{\mathrm{eff}}^4 [\ln(2n-1) - 0.365] \qquad n \geq 2$$

should be:

$$\mathrm{A}(n) = \frac{8\mathrm{A}_0}{3n^5} Z_{\mathrm{eff}}^4 [\ln(2n-1) - 0.365] \qquad n \geq 2$$

Page 195 eq. (5.59)

written:

$$\tau_k = \left[\sum_{i \leq k} A_{ik} \right]^{-1}$$

should be:

$$\tau_k = \left[\sum_{i \leq k} A_{ki} \right]^{-1}$$

Page 195 1st line after eq. (5.59):

written: A_{ik}

should be: A_{ki}

Page 317 Figure 6.21:

written caption: Experimental cross sections for $\mathrm{He}^+ + \mathrm{He}^+$ collisions as a function of the center-of-mass energy ...

should be: Experimental cross sections for $\mathrm{H}^+ + \mathrm{He}^+$ collisions as a function of the center-of-mass energy...