

# Errata: Maxim Olshanii, “Back-of-the-Envelope Quantum Mechanics...” (World Scientific (2014))

Maxim Olshanii\*

*Department of Physics, University of Massachusetts Boston, Boston Massachusetts 02125, USA*

(Dated: November 19, 2019)

“p.”=page  
“pr.”=problem  
“eq.”=equation  
“ch.”=chapter

## Misprints

- p. xii, pr. 2.2.8: “Schrö-dinger” should read “Schrödinger”;
- p. 4, eq. 1.6:  $\begin{pmatrix} 1 \\ 0 \end{pmatrix}$  should read  $\begin{pmatrix} 0 \\ 1 \end{pmatrix}$ ;
- p. 5, just above “— Solution for the unknown”:  $\begin{pmatrix} 0 \\ 1 \end{pmatrix}$  should read  $\begin{pmatrix} 1 \\ 0 \end{pmatrix}$ ;
- p. 8, eq. 1.9:  $\dots + \frac{1}{2}x^2 + \dots$  should read  $\dots + \frac{1}{2}x^2\psi(x) + \dots$ ;
- p. 8, just above “Imagine that ...”: 3.74 should read 2.74
- p. 9, eq. 1.10:  $\dots + \frac{m\omega^2}{2}x^2 = \dots$  should read  $\dots + \frac{m\omega^2}{2}x^2\psi(x) = \dots$
- p. 95, pr. 5.2.2:  $E_n^{(1)} = \langle \psi_n^{(0)} | \hat{V} | \psi_n^{(0)} \rangle$  should read  $E_{g.s.}^{(1)} = \langle \psi_{g.s.}^{(0)} | \hat{V} | \psi_{g.s.}^{(0)} \rangle$ ;
- p. 126, first line:  $\lambda = 0$  should read  $\lambda = 1$ ;
- p. 129, eq. 9.2:  $N$  should read  $\mathcal{N}$ ;
- p. 129, eq. 9.3:  $d^3\vec{r}$  should read  $d^3\vec{r}'$ ;
- p. 37, pr. 2.3.2: in the formula, the prefactor  $\frac{1}{\hbar^d}$  should read  $\frac{1}{(2\pi\hbar)^d}$ .

## Acknowledgments

I am grateful to Robert Barr for identifying a good half of the misprints listed.

---

\* Electronic address: [maxim.olchanyii@umb.edu](mailto:maxim.olchanyii@umb.edu)