

## Errors in *Invitation to Quantum Mechanics*

— Dan Styer

The errors below appear in the printed version of *Invitation to Quantum Mechanics* and in the free downloadable pdf version dated 31 January 2022. They are corrected in the pdf version dated 9 February 2024.

### 22 November 2022

Replace the paragraph on page 87 beginning with “Replace Alice and Bob’s vertical analyzers...” with:

Replace Alice and Bob’s vertical analyzers with flipping Stern-Gerlach analyzers. After Alice receives her random sequence of pluses and minuses, encountering her random sequence of analyzer orientations, she sends both these sequences to Bob over an open communication line. (Eve will intercept this information but it won’t do her any good, because she won’t know the corresponding information for Bob.) Bob now knows both the results at his analyzer and the results at Alice’s analyzer, so he can test to see whether the atom pairs were entangled. If he finds that they were, then Eve is not listening in. If he finds that they were not entangled, then he knows for certain that Eve *is* listening in, and they must not use their compromised key.

### 11 September 2023

In the figure on page 52, at the very right, change  $\mu_{(-x)} = +\mu_B$  to  $\mu_{(-x)} = -\mu_B$ , and change  $\mu_{(-x)} = -\mu_B$  to  $\mu_{(-x)} = +\mu_B$ . (Thanks to Iago Braz Mendes for catching this error.)

### 9 February 2024

On page 22, the first display equation should be

$$\frac{(\lambda_x/\lambda)^5}{e^{\lambda_x/\lambda} - 1},$$

the second display equation should be

$$\frac{x^5}{e^x - 1}.$$

(Thanks to Flavio Franco for catching this error.)