MM2 – Chapter 15 – Section 4

Pre-Class Question:

Google the words “Boson” and “Fermion” and write a short paragraph of what you learned.

Class Worksheet

1. Set up the uniform sample spaces for the problem of putting 2 particles in 3 boxes, for classical distinguishable particulars, Fermions, and Bosons.

2. Consider how you would need to adapt the Random walk calculation to make it follow Fermion statistics. What would happen? How would it be different for Bosons?

3. Consider how you would need to adapt the Random walk calculation to make it a 2D problem? Consider a 2D gas of large particles randomly colliding with smaller particles.

4. Flex Time for overflow