

University of California Riverside

PHYS 133, Statistical Mechanics, Spring 2019

Problem set #1

Due April 19, 2019 @ 5:00pm

1. **Read and review.** Sethna Ch. 1 and Ch. 2. These chapters lay the foundation for the course and special attention should be paid (i.e., work through the calculations).
2. **Quantum Dice.** Sethna Problem 1, Chapter 1.
3. **Probability Distributions.** Sethna Problem 2, Chapter 1.
4. **Photon Diffusion in the Sun.** Sethna Problem 2, Chapter 2.
5. **Molecular Motors and Random Walks.** Sethna Problem 3, Chapter 2.