

University of California Riverside

PHYS 133, Statistical Mechanics, Spring 2019

Problem set #3

Due May 24, 2019 @ 5:00pm

1. **Read and review.** Sethna Ch. 3 and Ch. 5.
2. **Connecting Two Macroscopic Systems.** Sethna Problem 6, Chapter 3.
3. **Microcanonical Energy Fluctuations.** Sethna Problem 8, Chapter 3.
4. **Life and the Heat Death of the Universe.** Sethna Problem 1, Chapter 5.
5. **Pressure-Volume Diagram.** Sethna Problem 5, Chapter 5.