

Physics 525 – Homework # 7

Due Apr. 10, 2024

- 7.1** (10 points) At which temperatures the electrical resistance of an Al wire is exactly zero?
- 7.2** (10 points) At which magnetic field the resistance of Nb wire cannot be zero, even if the temperature is very near absolute zero?
- 7.3** (20 points) List some applications of superconductors. Use online AI (artificial intelligence) to answer this question.
- 7.4** (20 points) What is the difference between a perfect conductor and a superconductor?