

Exercises in Statistical Mechanics

Based on course by Doron Cohen, has to be proofed
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This exercises pool is intended for a graduate course in “statistical mechanics”. Some of the problems are original, while other were assembled from various undocumented sources. In particular some problems originate from exams that were written by B. Horovitz (BGU), S. Fishman (Technion), and D. Cohen (BGU).

==== [Exercise 6030] Thermionic emission of electrons from a metal

$$g(E) = g_{\text{metal}}(E) + g_{\text{vacuum}}(E)$$

Find the rate of the emitting electrons from a metal with work function W , when the temperature is ‘low’ and equal to T .

