PHY2610 - Thermal Physics

Spring 2024

Quiz 8

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- (a) Over a limited temperature range the heat capacity at constant volume of a particular type of system is inversely proportional to the temperature.
 - (i) What is the temperature dependence of the internal energy, at constant volume, for this type of system? [5]
 - (ii) If two such systems, at initial temperatures T_{10} and T_{20} , are put into purely thermal contact what is the equilibrium temperature of the pair? [5]