

Today's exercise (9/13/2021)

Recall that local thermodynamic equilibrium requires that the particles in the medium are 'in equilibrium' with the radiation field.

1. Express what this means as an energy balance. Hint: relate the processes described by the Einstein coefficients to photon energy exchange equilibrium.
2. Introduce into your relation the appropriate radiation field.
3. Finally, write down the appropriate relation for the densities in your equation.

