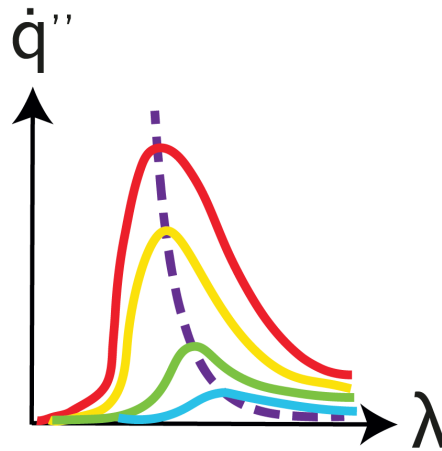


# Radiation - Kirchoff 05

Give an expression for the emissivity  $\epsilon$  of a black body



A black body does not transmit  $\tau = 0$ , nor reflect  $\rho = 0$  any radiation.

Knowing that for a radiating body  $\rho + \alpha + \tau = 1$ , it yields that:

$$\alpha = 1$$

This in combination with Kirchoff's law gives us:

$$\epsilon = 1$$