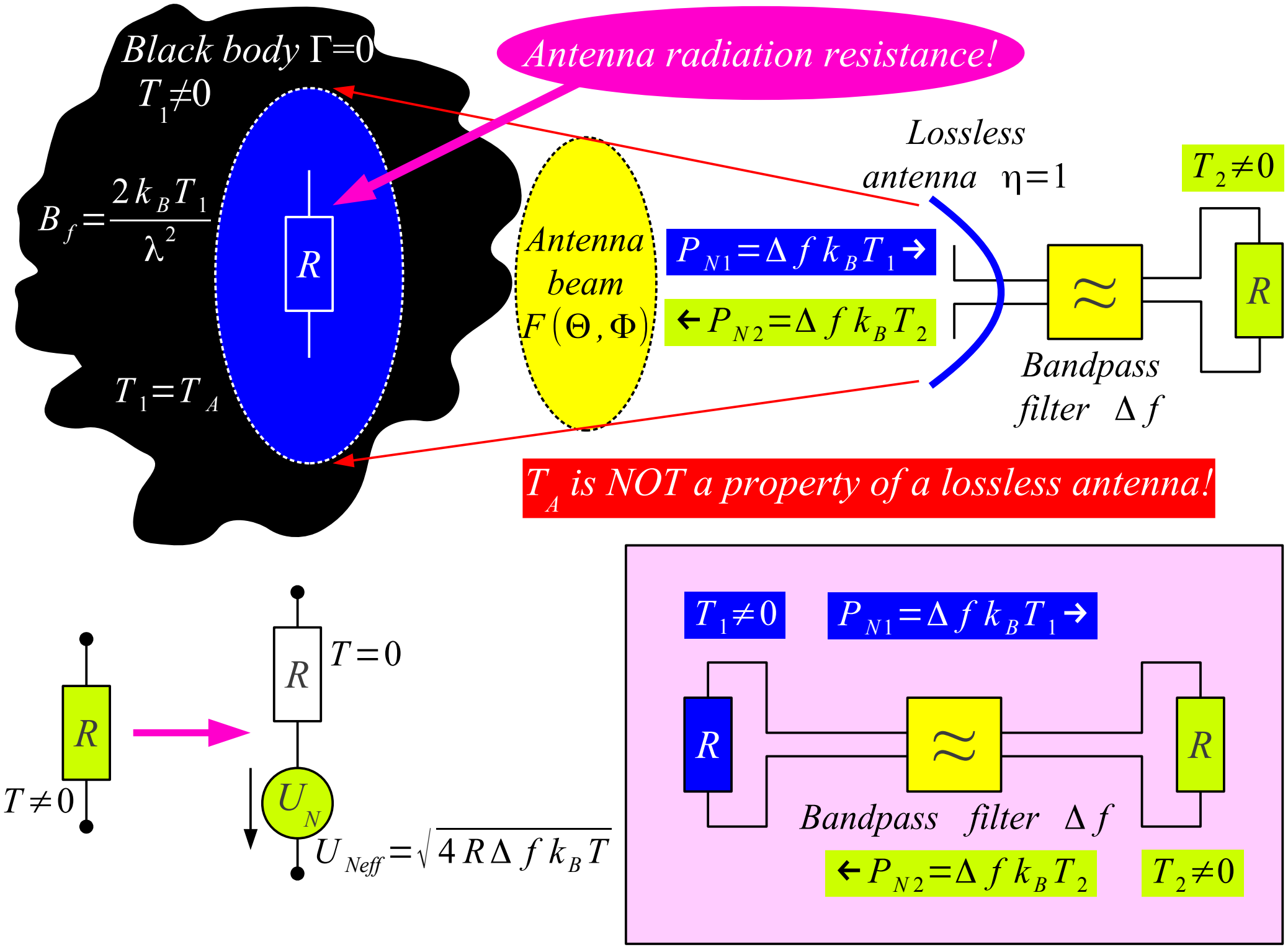
Black body Γ=0
$T_1 \neq 0$
$B_f = \frac{2 k_B T_1}{\lambda^2}$
R
$T_1 = T_A$
Antenna radiation resistance!
Antenna beam $F(\Theta, \Phi)$
$P_{N1} = \Delta f k_B T_1 \rightarrow$
$\leftarrow P_{N2} = \Delta f k_B T_2$
Lossless antenna η=1
≈
Bandpass filter Δf
$T_2 \neq 0$
R
T_A is NOT a property of a lossless antenna!
R
$T \neq 0$
R
$T = 0$
U_N
$U_{Neff} = \sqrt{4 R \Delta f k_B T}$
$T_1 \neq 0$
$P_{N1} = \Delta f k_B T_1 \rightarrow$
R
≈
R
Bandpass filter Δf
$\leftarrow P_{N2} = \Delta f k_B T_2$
$T_2 \neq 0$