In[91]:= 
$$k = 1.38 * 10^{(-23)}$$
;  
 $\epsilon = 10^{-23}$ ;  

$$P_{-\epsilon}[T_{-}] := \frac{Exp\left[\frac{\epsilon}{k*T}\right]}{1 + Exp\left[\frac{-\epsilon}{k*T}\right] + Exp\left[\frac{\epsilon}{k*T}\right]}$$

$$PS_{-\epsilon}[T_{-}] := 1 - Exp\left[\frac{-\epsilon}{k*T}\right]$$

$$\label{eq:plot_problem} \begin{split} &\text{In[99]:= Plot} \left[ \left\{ P_{-\varepsilon} \left[ T \right], \; PS_{-\varepsilon} \left[ T \right] \right\}, \; \left\{ T, \; -10, \; 10 \right\}, \\ &\text{PlotRange} \rightarrow \left\{ -0.5, \; 1.2 \right\}, \; \text{AxesLabel} \rightarrow \text{Automatic}, \; \text{PlotLabels} \rightarrow \text{Automatic} \right] \end{split}$$

