

# $F_{ab}(x_r)$ = achromatic receptor response

antagonistic model  
 $a=1,00$ ,  $b=1,00$   $e=2,7182$   
 $\beta=1,0$

$$F_{ab}(x_r) = -b \beta \frac{e^{x_r/a} - e^{-x_r/a}}{e^{x_r/a} + e^{-x_r/a}} = -b \beta \tanh[x_r/a]$$

$$F'_{ab}(x_r) = -4 b \alpha / [a \{e^{x_r/a} + e^{-x_r/a}\}^2]$$

$a=1,00$ ;  $b=1,00$   $F'_{ab}(x_r)$   
 $\alpha=0,55$

range luminance  
 office display without & 100% reflection

