

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

$$F_{ab}(x_r) = b \frac{10^{x_r/a'} - 10^{-x_r/a'}}{10^{x_r/a'} + 10^{-x_r/a'}}$$

$$10^{x_r} = e^{\ln(10) x_r}, \quad 10^{x_r/\ln(10)} = e^{x_r}$$

$$a=1,00, \quad b=1,00 \quad e=2,718282$$

$$a' = a \ln(10) = 2,302$$

$$10^{x_r/a'} = 10^{x_r / [a \ln(10)]} = e^{x_r/a}$$

$$F'_{ab}(x_r) = 4b / [a \{ 10^{x_r/a'} + 10^{-x_r/a'} \}^2]$$

$a=1,00; b=1,00$

