

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

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

$10^{x_r} = e^{\ln(10) x_r}$ ,  $10^{x_r/\ln(10)} = e^{x_r}$   
 $a=1,00$ ,  $b=1,00$   $e=2,718282$

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

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

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

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

