

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

$$Q_{ab}(x_r) = \frac{b}{\ln \sqrt{2}} \ln \left[ 1 + \frac{1}{1 + \sqrt{2} 10^{x_r/a}} \right] - b \cdot 10^{x_r} = e^{\ln(10) x_r}, \quad 10^{x_r/\ln(10)} = e^{x_r}$$

$a=0,50, \quad b=1,00, \quad e=2,718282$

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

$$a' = a \ln(10) = 1,151$$

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

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

