

$\log(Y/\Delta Y)$

CIE Y contrast

$0,1C_{r,LABJND}$  and  $C_{r,CIELAB}$

$C_r=(Y/\Delta Y)$

Y contrast according to CIELAB

$$\begin{aligned}\log(Y/dY) &= \log[(1/3) (116/Y_n)] + (1/3) \log(Y/Y_n) \\ &= \log[(1/3) (116/(Y_n^{1/3}))] + (1/3) \log(Y)\end{aligned}$$

1

$L^*_u=50, Y_u=18, dY_u=0,83, Y_u/dY_u=21$

$m_{u+}=0,13$

0

$\log(Y/dY)=1,33, m_u=0,33$

application range

$m_{u-}=0,14$

-1

0,1

1

10

$Y_u=18$  100 y

2

$\log(Y)$