

$\log(Y/\Delta Y)$

CIE Y contrast

$$C_r = (Y/\Delta Y)$$

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

Y contrast according to CIELAB

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

10

0

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

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

$$m_{u+} = 0,13$$

$$m_{u-} = 0,14$$

application range

-1

0,1

1

10

$Y_u = 18$ 100 Y

2

$\log(Y)$