

Three elementary (e) coordinates  $rgb^*_e$  describe 8 colours  $RGB_e$ ,  $CMY_e$ , and  $NW$ .

Hexagon-triangle system based on elementary (e) colours:  $rgb^*_e$   
with **linear relations** between  $rgb^*_e - LCH^*_e$

(compare approximately linear relations between  $rgb_{sRGB}$  and  $L^*$ )

Equations  $rgb^*_e - LCH^*_e$  in both directions have been published, see:  
*Richter, CIE-Proceedings, Beijing, 2008, Volume 3 und DIN 33872-1*

Three equations (tables) are needed for office applications:

$rgb_d - LCH^{*'}_d$  for a 9x9x9 grid of equally spaced  $rgb_d$ -input data

$rgb^*_e - LCH^*_e$  a 9x9x9 grid of equally spaced data  $rgb^*_e$  and  $LCH^*_e$

$rgb'^*_e - LCH'^*_e \sim LCH^*_e$  elementary linearization:  $rgb_d \rightarrow rgb'^*_e = rgb_{de}$

