

$$\begin{array}{l} ? \\ X = \int_{380}^{780} I(\lambda)*x(\lambda)d\lambda Y = \int_{380}^{780} I(\lambda)*y(\lambda)d\lambda Z = \int_{380}^{780} I(\lambda)*z(\lambda)d\lambda \\ (1) \end{array}$$

$$\begin{array}{l} waves \\ X+ \\ Y+ \\ Z= \\ const \end{array}$$

$$\begin{array}{l} x = \frac{X}{X+Y+Z}y = \frac{Y}{X+Y+Z}z = \frac{Z}{X+Y+Z} \\ (2) \end{array}$$

$$\begin{array}{l} diagram \\ representationRGB \\ imitations \end{array}$$

$$\begin{array}{l} ?? \\ representation_{cylindric} \\ representation_{cone} \\ Y = K_R*R+(1-K_R-K_B)*G+K_B*BCb = \frac{1}{2}*\frac{B-Y}{1-K_B}Cr = \frac{1}{2}*\frac{R-Y}{1-K_R} \end{array}$$

$$\begin{array}{l} (3) \\ R,G,B \\ K_R,K_B \\ representationCbCrY = 0.5 \\ [0,1] \\ [0,...,255] \\ square \\ disk \\ diamond \\ rectangle \\ gauss \\ ?? \\ ?? \\ ?? \\ ?? \\ ?? \\ ? \end{array}$$

$$\begin{array}{l} A\ominus B = z \in E|B_z \subseteq A \\ (4) \end{array}$$

$$\begin{array}{l} before \\ after \end{array}$$

$$\begin{array}{l} A\oplus B = z \in E|B_z^\delta \cap A \neq \emptyset \\ (5) \end{array}$$

$$\begin{array}{l} before \\ after \end{array}$$

$$\begin{array}{l} A\circ B = (A\ominus B)\oplus B \\ (6) \end{array}$$

$$\begin{array}{l} A\bullet B = (A\oplus B)\ominus B \\ (7) \end{array}$$

$$\begin{array}{l} A_s = a + s|a \in A, \forall s \in E \\ (8) \end{array}$$

$$\begin{array}{l} A \\ m\times \\ n \\ K \\ a\times \\ b \\ (c_1,c_2) \end{array}$$

$$\begin{array}{l} R_{i,j} = \sum_{x=1}^a \sum_{y=1}^b A_{i-c_1+x,j-c_2+y}*K_{x,y}, i = 1..m, j = 1..n \\ (9) \end{array}$$

$$\begin{array}{l} convolution_{example} \\ ?? \\ ?? \\ A \\ m+ \\ 2a\times \\ n+ \\ 2b \\ filter_{representationBoxfilter} \end{array}$$

$$\begin{array}{l} G_{x,y} = Ae^{-\frac{(x-\mu_x)^2}{2\sigma_x^2} - \frac{(y-\mu_y)^2}{2\sigma_y^2}} \\ (10) \\ ?? \\ ?? \end{array}$$