

CIEBasedABC-color space in PSL2
transformation $ABC^* \rightarrow XYZ$
three coloriness $\rightarrow$ tristimulus values

$$\begin{pmatrix} L^* \\ M^* \\ N^* \end{pmatrix} = \begin{pmatrix} 3 \times 3 \\ \text{Matrix } ABC \end{pmatrix} \times \begin{pmatrix} D(A^*) \\ D(B^*) \\ D(C^*) \end{pmatrix}$$
$$\begin{pmatrix} X \\ Y \\ Z \end{pmatrix} = \begin{pmatrix} 3 \times 3 \\ \text{Matrix } LMN \end{pmatrix} \times \begin{pmatrix} D(L^*) \\ D(M^*) \\ D(N^*) \end{pmatrix}$$