Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

$$F_{ab}(x_r,a)=b\tanh(x_r/a)=b\frac{e^{x_r/a}-e^{-x_r/a}}{e^{x_r/a}+e^{-x_r/a}} \quad x_r=\log(L_r),\ L_r=L/L_u,\ x_r<=0 \quad [1]$$

$$\frac{dF_{ab}(x_r,a)}{dx_r}=\frac{4b}{a[e^{x_r/a}+e^{-x_r/a}]^2} \quad x_r=\ln L_r/\ln(10),\ dx_r/dL_r=1/(\ln(10)L_r),\ m=1/(\ln(10)a) \quad [5]$$

$$\frac{dF_{ab}(x_r,a)}{dx_r}\frac{dx_r}{dL_r}=\frac{4bm}{[e^{x_r/a}+e^{-x_r/a}]^2L_r} \quad L_r/dL_r=L/dL,\ dF_{ab}(x_r,a)=1 \quad [6]$$

$$\frac{L}{dL}=\frac{4bm}{[e^{x_r/a}+e^{-x_r/a}]^2} \qquad dL=\frac{[e^{x_r/a}+e^{-x_r/a}]^2L}{4bm} \quad [7]$$

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Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

$$F_{cb}(x_r,c)=b\tanh(x_r/c)=b\frac{e^{x_r/c}-e^{-x_r/c}}{e^{x_r/c}+e^{-x_r/c}} \quad x_r=\log(L_r),\ L_r=L/L_u,\ x_r>=0 \quad [1]$$

$$\frac{dF_{cb}(x_r,c)}{dx_r}=\frac{4b}{c[e^{x_r/c}+e^{-x_r/c}]^2} \quad x_r=\ln L_r/\ln(10),\ dx_r/dL_r=1/(\ln(10)L_r),\ n=1/(\ln(10)c) \quad [5]$$

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

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$$\frac{L/dL}{(L/dL)_u}=\frac{4}{[e^{x_r/a}+e^{-x_r/a}]^2};\ \frac{dL}{dL_u}=\frac{[e^{x_r/a}+e^{-x_r/a}]^2L}{4L_u} \quad [8]$$

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Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

$$F_{cb}(x_r,c)=b\tanh(x_r/c)=b\frac{e^{x_r/c}-e^{-x_r/c}}{e^{x_r/c}+e^{-x_r/c}} \quad x_r=\log(L_r),\ L_r=L/L_u,\ x_r>=0 \quad [1]$$

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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$$\frac{L}{dL}=\frac{4bm}{[L_r^{2m}+2+L_r^{-2m}]} \qquad dL=\frac{[L_r^{2m}+2+L_r^{-2m}]L}{4bm} \quad [8]$$

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

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$$\frac{L/dL}{(L/dL)_u}=\frac{4}{[e^{x_r/a}+e^{-x_r/a}]^2};\ \frac{dL}{dL_u}=\frac{[e^{x_r/a}+e^{-x_r/a}]^2L}{4L_u} \quad [8]$$

$$\frac{L/dL}{(L/dL)_u}=1\ \text{für}\ \begin{cases}L=L_u\\x_r=0\end{cases} \qquad \frac{dL}{dL_u}=1\ \text{für}\ \begin{cases}L=L_u\\x_r=0\end{cases} \quad [9]$$

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Achromatisches Sehen mit relativer Leuchtdichte
Mathematikgleichungen mit Hyperbelfunktionen

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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Mathematische Hyperbel- und Potenzfunktionen

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Achromatische Sehen mit relativer Leuchtdichte
Mathematische Hyperbel- und Potenzfunktionen

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Siehe ähnliche Dateien der ganzen Serie: http://farbe.li.tu-berlin.de/igis.htm
Technische Information: http://farbe.li.tu-berlin.de oder http://color.li.tu-berlin.de

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