



line element of light technology
(luminance L) and color metrics
with „color values” P, D, T
luminance signal function $F(L)$
color signal functions $F(P, D, T)$
Taylor-derivations:
 $\Delta F(L) = \frac{dF}{dL} \Delta L$
 $\Delta F(P, D, T) = \frac{dF}{dP} \Delta P + \frac{dF}{dT} \Delta T + \frac{dF}{dD} \Delta D$

line element of Helmholtz
(1896) with „color values” P, D, T
three separate color signal functions
 $F(P) = i \ln P$
 $F(D) = j \ln D$
 $F(T) = k \ln T$
Taylor-derivations:
 $\Delta F(P, D, T) = \frac{dF}{dP} \Delta P + \frac{dF}{dT} \Delta T + \frac{dF}{dD} \Delta D$
 $\Delta F(P, D, T) = \frac{i}{P} \Delta P + \frac{j}{D} \Delta D + \frac{k}{T} \Delta T$

