



Line element of light technology
 (luminance L) and colour metrics
 with „cone values“ L, M, S
 luminance response function $F(L)$
 colour response function $F(L, M, S)$
 Taylor-derivations:
 $\Delta F(L) = \frac{dF}{dL} \Delta L$
 $\Delta F(L, M, S) = \frac{dF}{dL} \Delta L + \frac{dF}{dM} \Delta M + \frac{dF}{dS} \Delta S$

line element of Helmholtz (1896)
 „cone values“ L, M, S
 separate colour response functions
 $F(L) = i \ln L$
 $F(M) = j \ln M$
 $F(S) = k \ln S$
 Taylor-derivations:
 $\Delta F(L, M, S) = \frac{dF}{dL} \Delta L + \frac{dF}{dM} \Delta M + \frac{dF}{dS} \Delta S$
 $\Delta F(L, M, S) = \frac{i}{L} \Delta L + \frac{j}{M} \Delta M + \frac{k}{S} \Delta S$