

4.7: Other Integrals

Other integrals occurring in the theory of stellar atmospheres are (using the abbreviated notation)

$$H = \frac{1}{4\pi} \int I \cos \theta d\omega = F/(4\pi) \quad (4.7.1)$$

$$= 0 \text{ if isotropic} \quad (4.7.2)$$

$$K = \frac{1}{4\pi} \int I \cos^2 \theta d\omega = cP/(4\pi) \quad (4.7.3)$$

$$= J/3 \text{ if isotropic.} \quad (4.7.4)$$

The SI units for F are W m^{-2} . For I, J, H, K they are $\text{W m}^{-2} \text{ sr}^{-1}$. For P they are Pa.

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