
Table of contents

Periodicity (Cyclicity), cyclicity repeats within lim (rotational, closed loop inside restricted band), transcendancy passes only once (tangential, linear infinit):

$$\begin{aligned} 2\pi &= k\lambda = \mathcal{T}\omega = \frac{\omega}{\nu} = k\frac{c}{\nu} = \frac{\Delta\varphi}{\Delta s}\frac{c}{\nu} = \frac{\Delta\varphi}{n} = \frac{u}{r} = \frac{h}{\hbar} = 2\frac{\mathcal{M}_B}{\mathcal{L}_B} \\ &= \left(\frac{\pi}{2} - \alpha\right) + \alpha + \left(\frac{\pi}{2} - \beta\right) + \beta + \pi \\ &= 360^\circ = 12 \text{ hours (half day)} = 12 \text{ music notes (one octave)} \end{aligned} \tag{1}$$

where:

α := irradiation angle, incoming radiation direction, from source/sender (Einstrahlungswinkel zur Normalen auf Grenzfläche des Mediums)

β := refraction angle for bented transmitted radiation A_t orientation in matter (Durchstrahlungswinkel zur Normalen aus Grenzfläche ins Medium)

\mathcal{M}_B := Blackbody Radiant Exitance

\mathcal{L}_B := Blackbody Radiance

Orientation of Radiation:

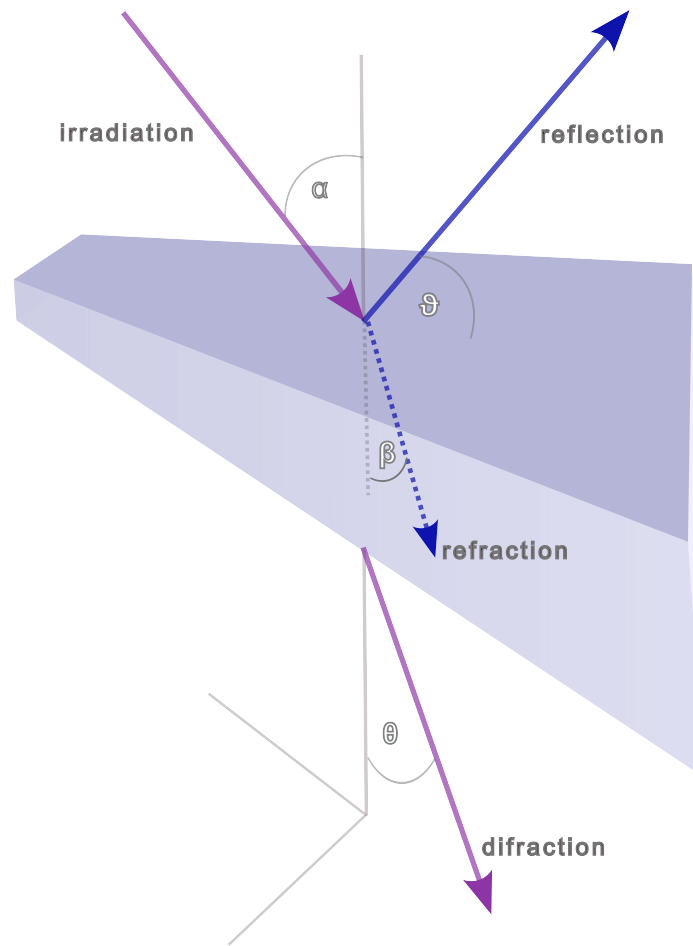


Figure 1: Radiation

ϑ = reflection angle for redirected radiation $A_{r\parallel}$ parallel to α from matter ¹

θ = diffraction angle for redirected radiation $A_{r\perp}$ orthogonal to α from matter ²

$\varpi = \beta_1 + \beta_2$ = angle of converging body surfaces (point tip of prismic medium), spread angle of prism

ς = deviation angle of redirected ray beam after refraction (transmission) and diffraction

¹Abstrahlwinkel zur Grenzfläche des Mediums

²Beugungswinkel durch Objekt ins Vakuum

u_g = aperture angle (acceptance) from sender source (at distance g)

w_b = inclination angle at observer receiver (at distance b)

ε = visual angle from observer/receiver (of eye)