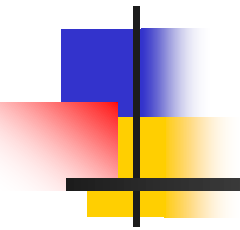
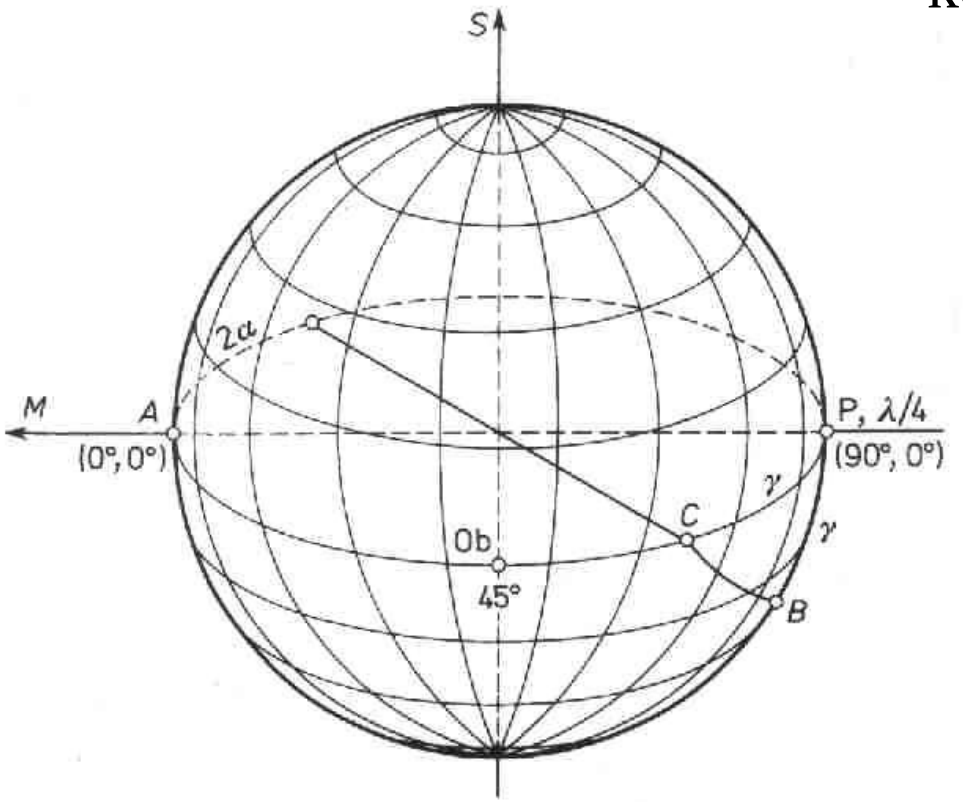
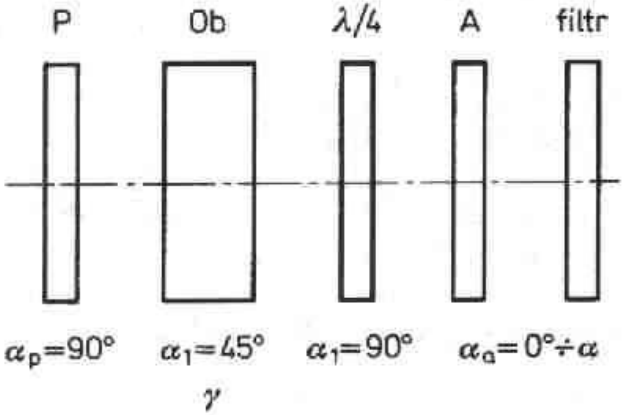
Kompensatory



Kompensatory azymutalne
- kompensator Senarmonta



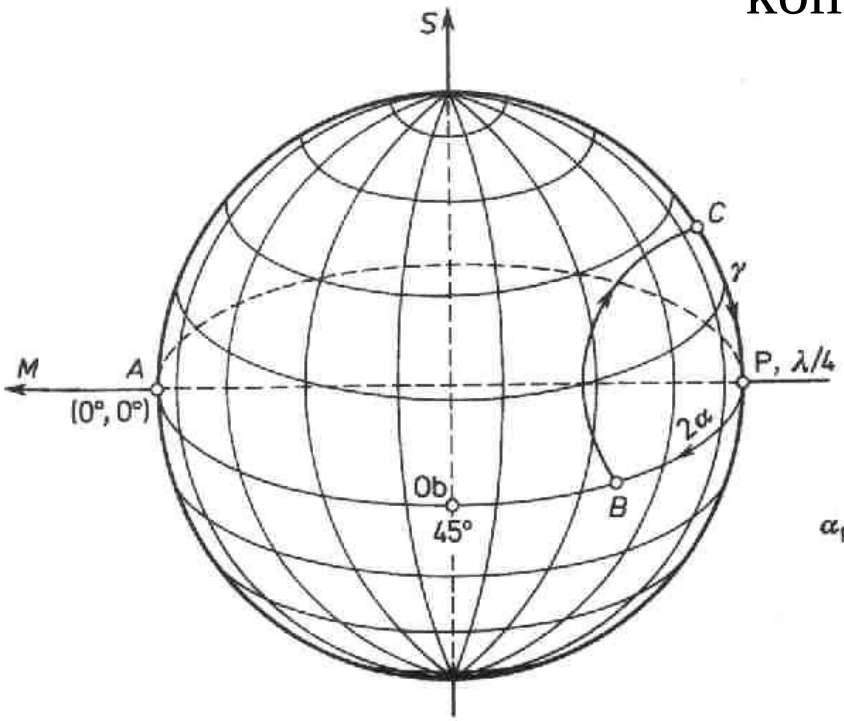
kompensator prosty

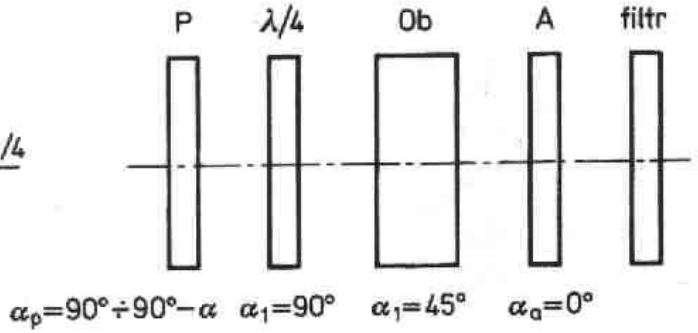


$$\gamma = 2\Delta\alpha_A$$

Kompensatory azymutalne
- kompensator Senarmonta

kompensator odwrotny





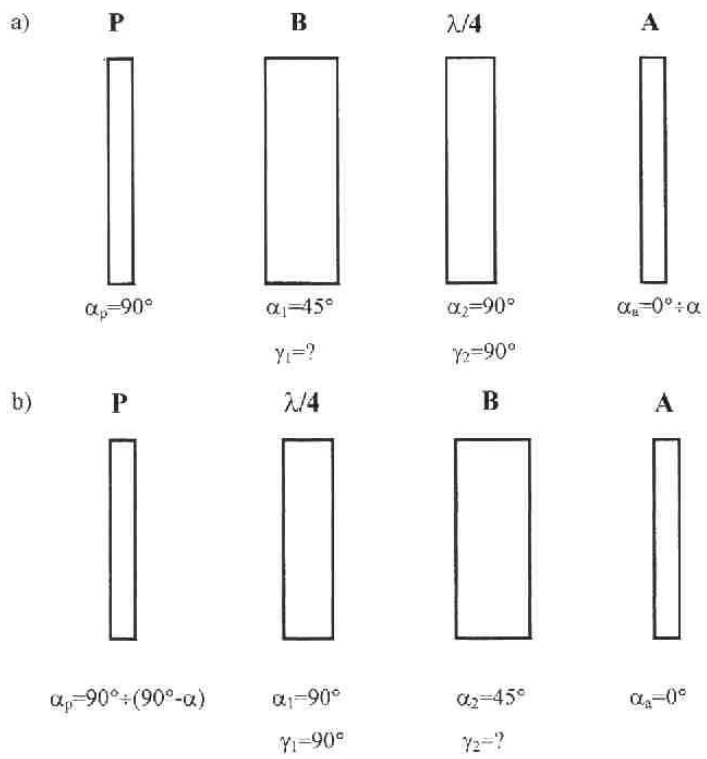
$$\gamma = 2\Delta\alpha_P$$

Kompensator Senarmonta - „zła” ćwierćfalówka

„zła” ale znana

$$\tan\gamma = \frac{\tan 2\Delta\alpha_A}{\sin\gamma_q}$$

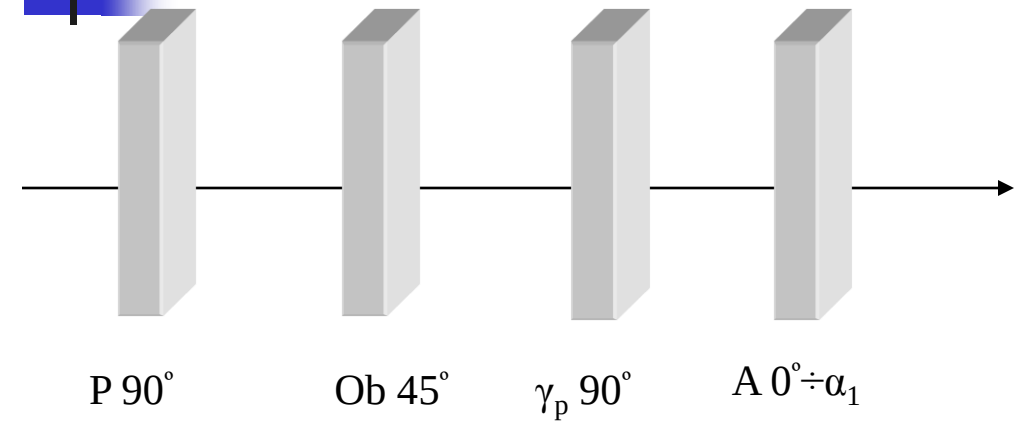
„zła” i nieznana



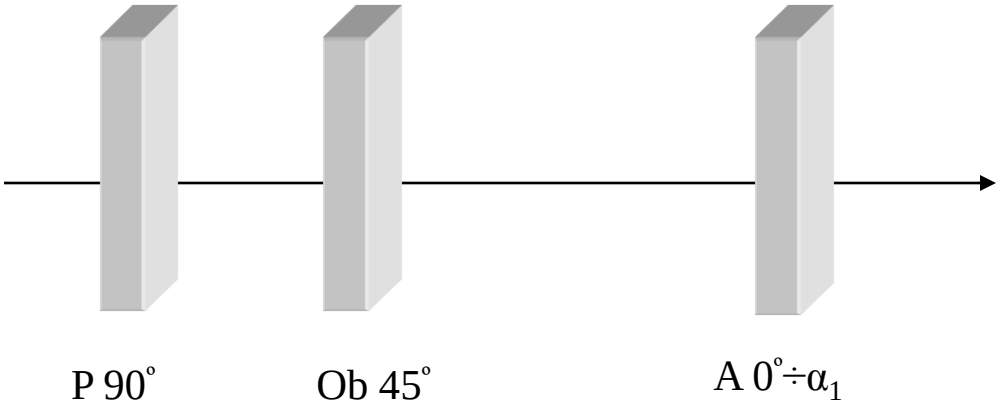
$$\tan 2\Delta\alpha_A = \tan\gamma_1 \sin 2\gamma_2$$

$$\tan 2\Delta\alpha_P = \tan\gamma_2 \sin 2\gamma_1$$

Kompensator Senarmonta dla ośrodków eliptycznie dwójłomnych



$$\tan 2\Delta\alpha_1 = \cos 2\vartheta_f \cdot \tan\gamma$$

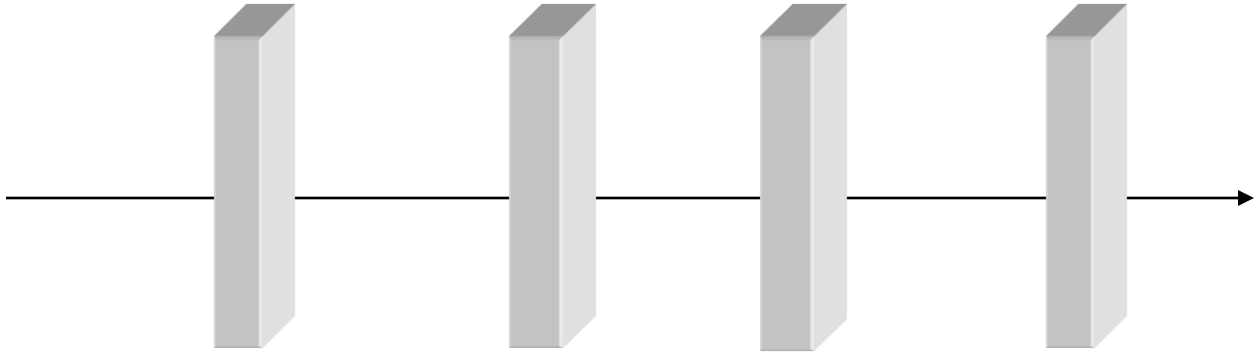


$$\tan 2\Delta\alpha_2 = \sin 2\vartheta_f \cdot \tan\gamma$$

$$\tan 2\vartheta_f = \frac{\tan 2\Delta\alpha_2}{\tan 2\Delta\alpha_1}$$

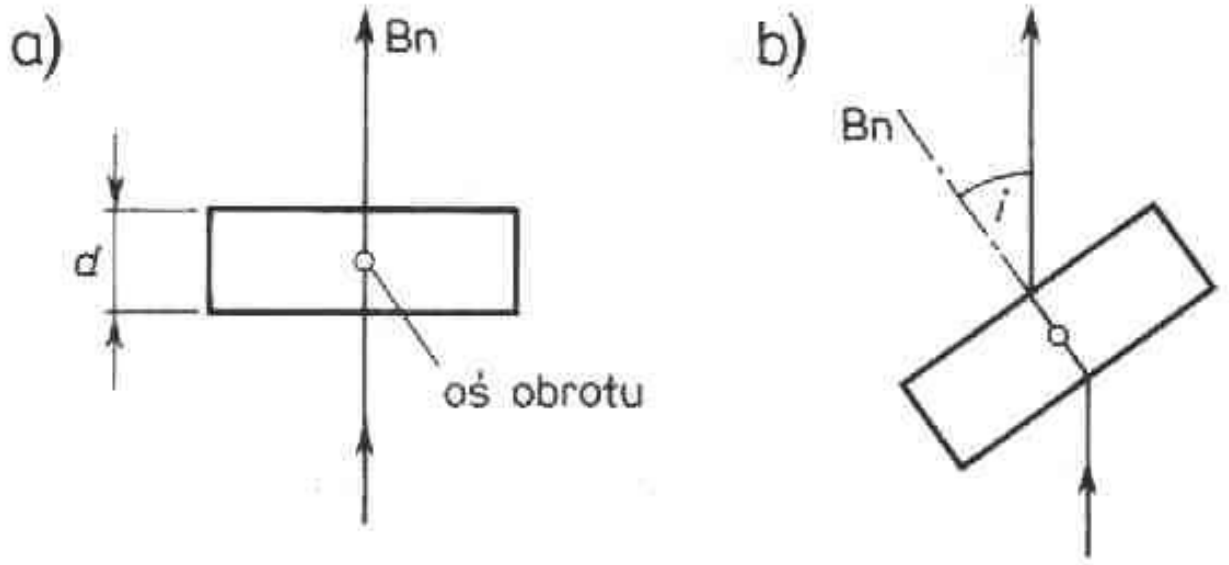
$$\tan^2\gamma = \tan^2 2\Delta\alpha_1 + \tan^2 2\Delta\alpha_2$$

Kompensatory bezpośrednie - zasada kompensacji



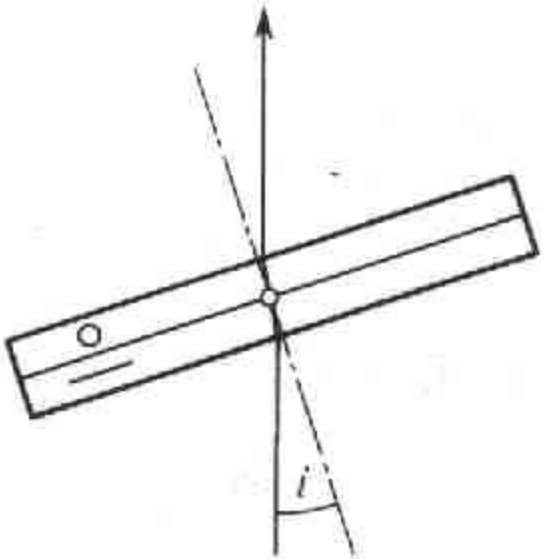
$$I = I_0 \sin^2\left(\frac{\gamma - \gamma_K}{2}\right) \dashrightarrow \gamma = \gamma_K \pm 2N\pi$$

Kompensator Bereka



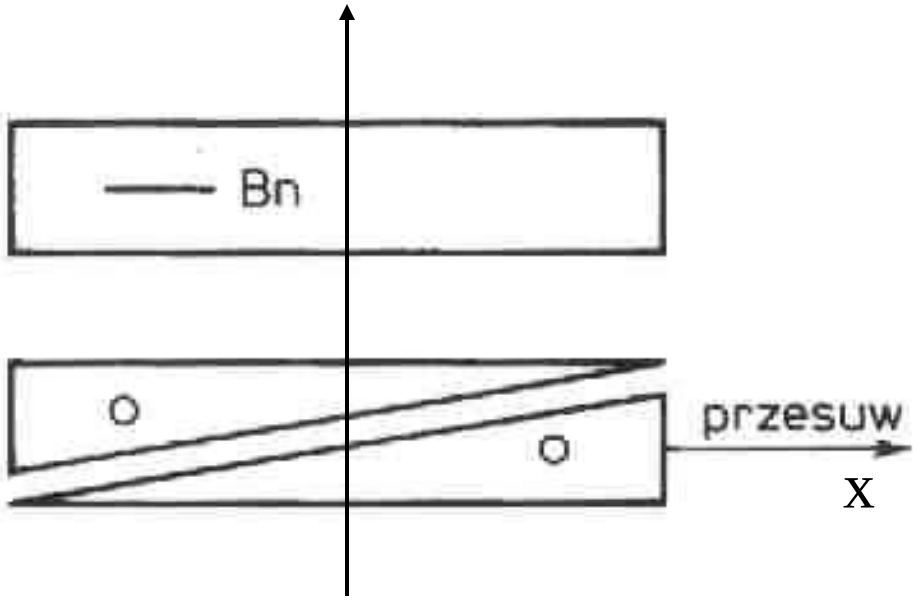
$$\gamma_K = \gamma_K(i)$$

Kompensator Ehringhausa



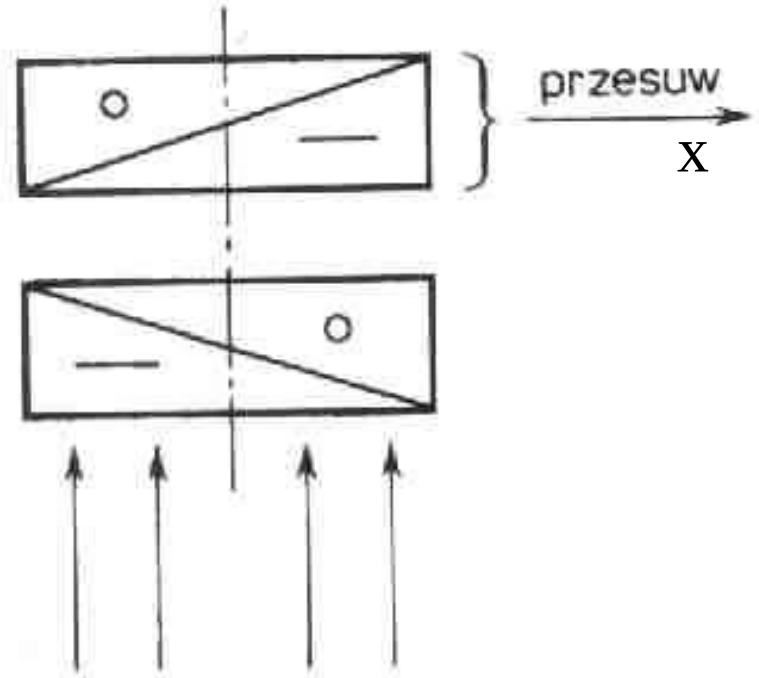
$$\gamma_K = \gamma_K(i)$$

Kompensator Soleila



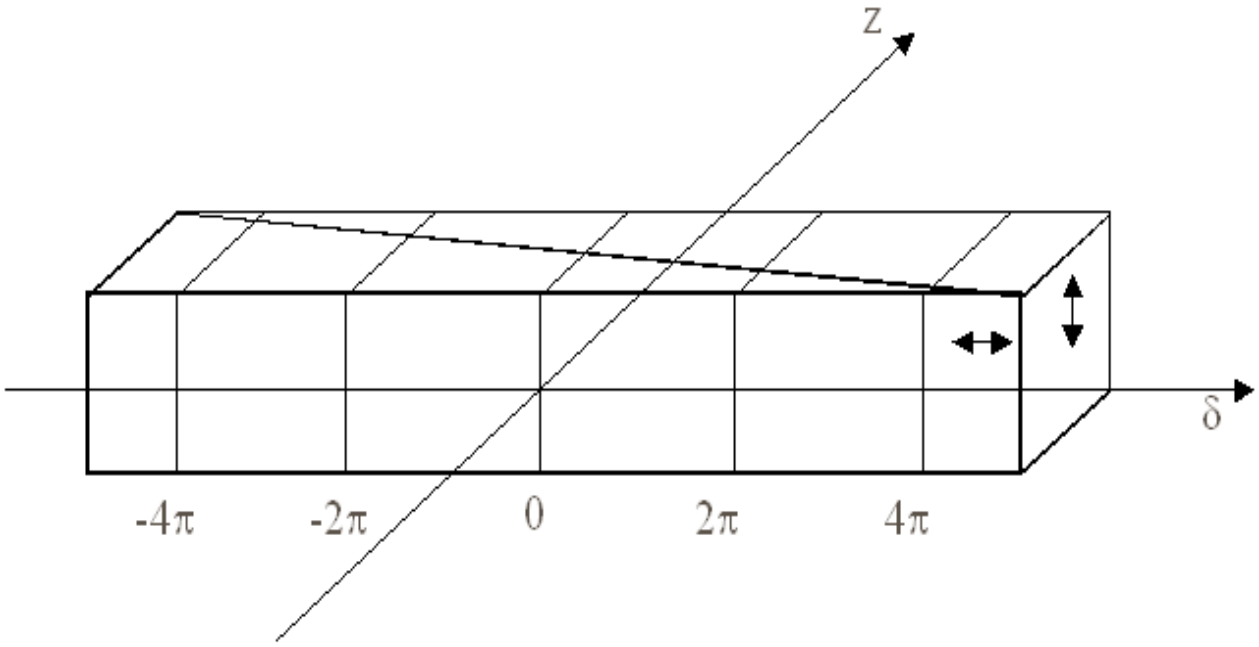
$$\gamma_K = \gamma_K(x)$$

Kompensator Bravais

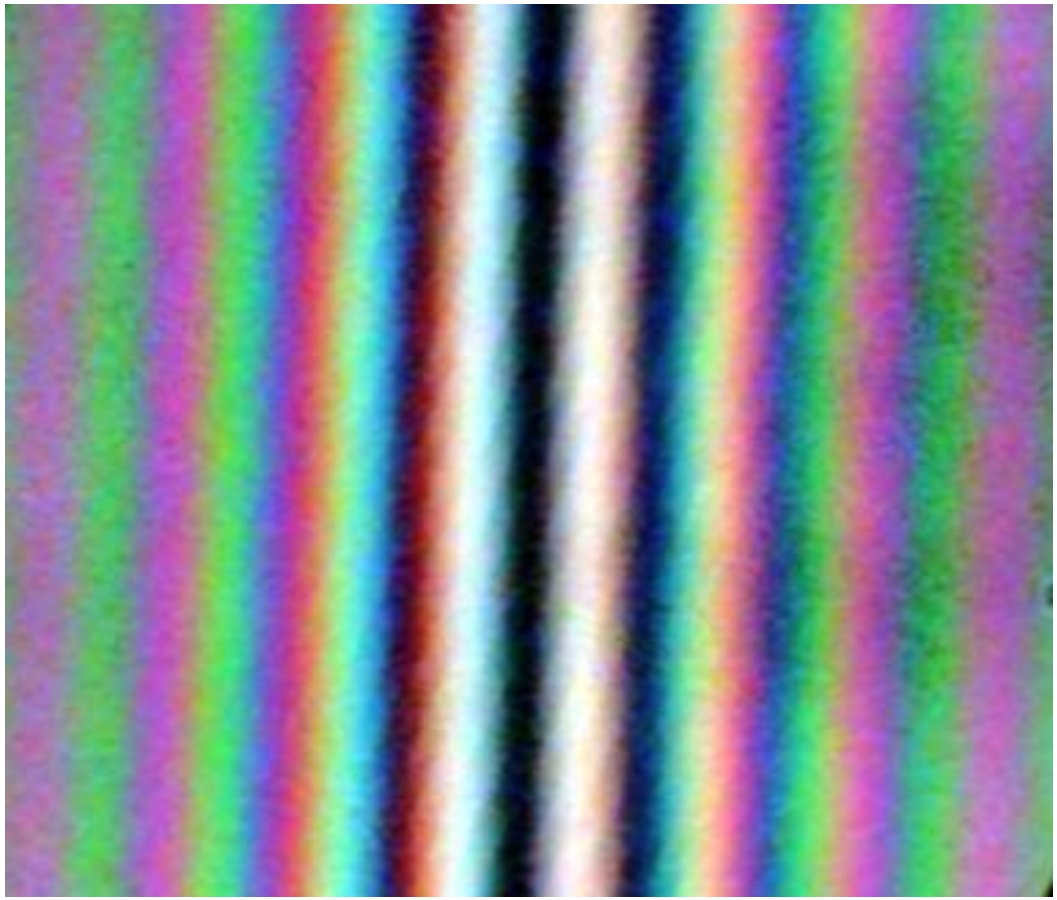


$$\gamma_K = \gamma_K(x)$$

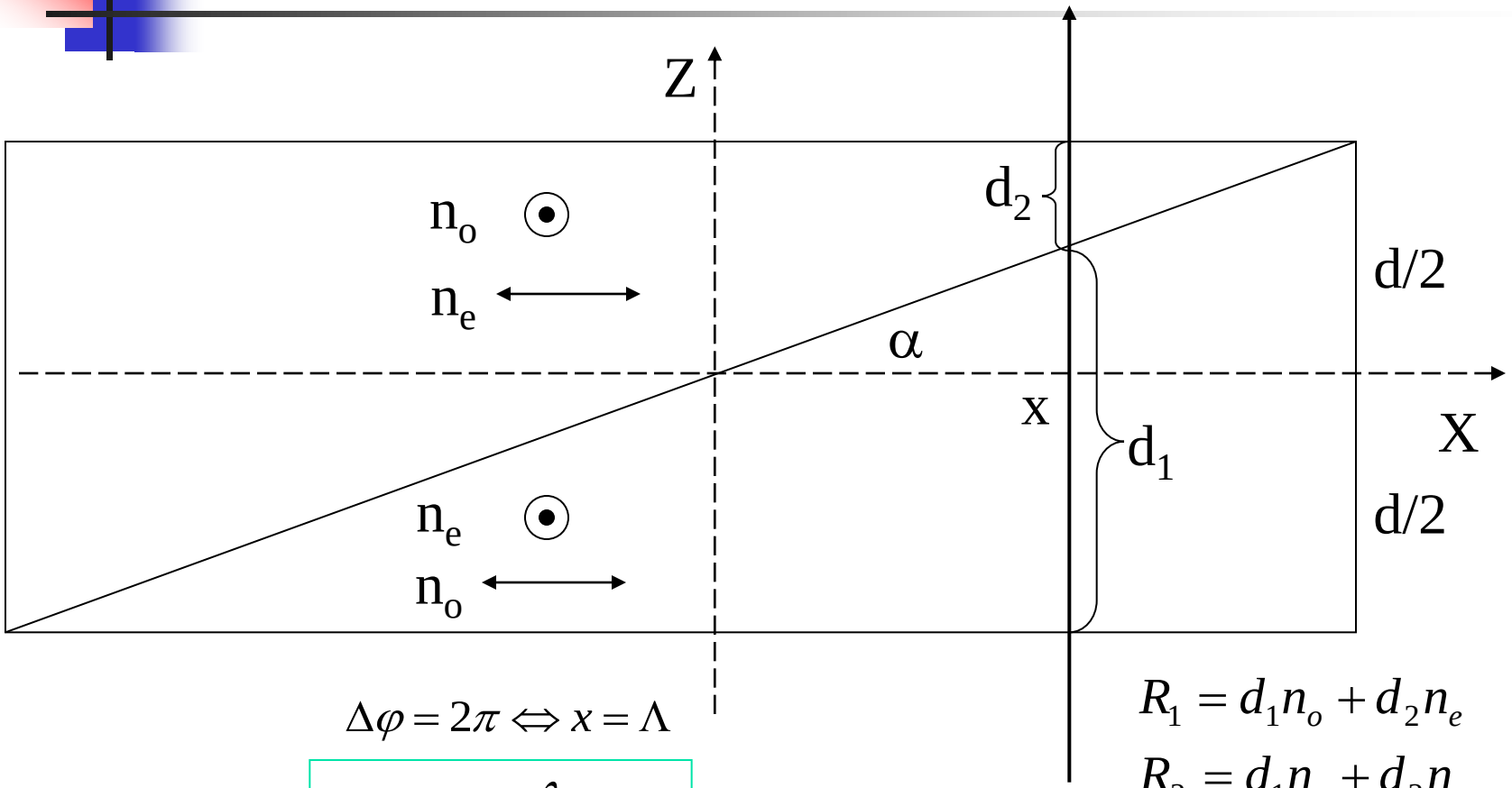
Kompensator Wollastona



Kompensator Wollastona



Kompensator Wollastona



$$\Delta\varphi = 2\pi \Leftrightarrow x = \Lambda$$

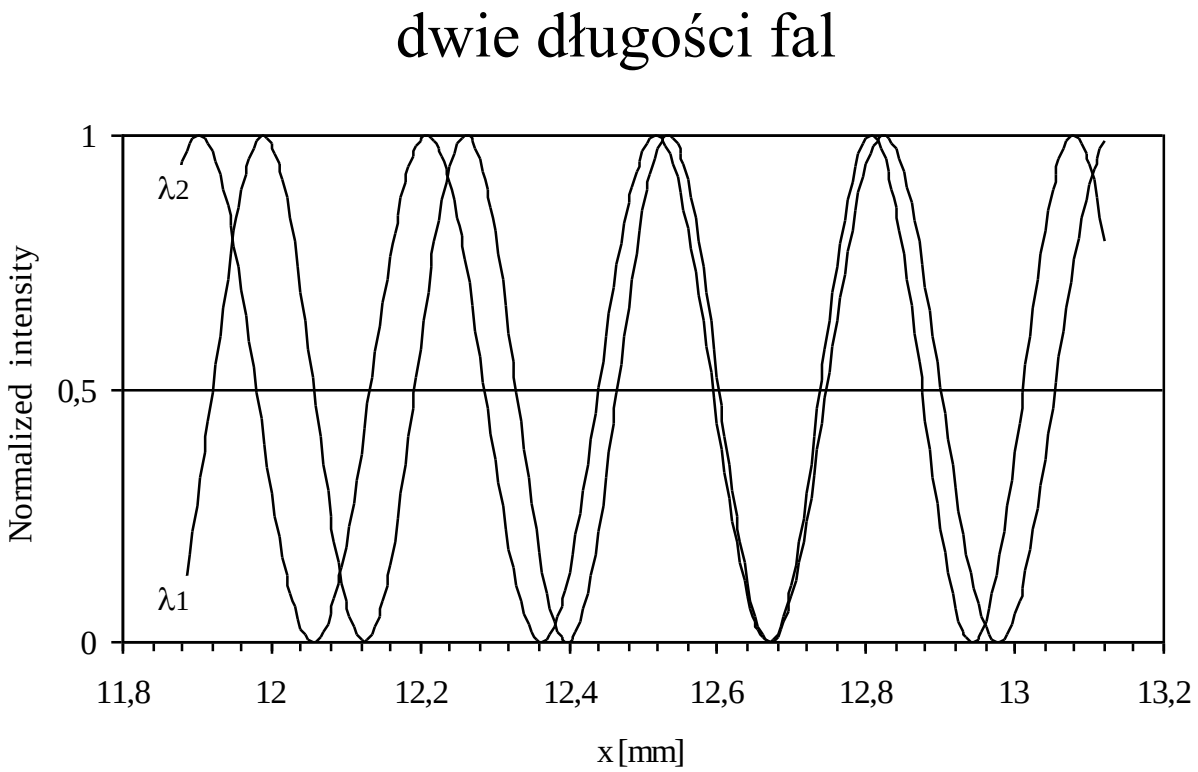
$$\Lambda = \frac{\lambda}{2\Delta n \cdot \tan\alpha}$$

$$R_1 = d_1 n_o + d_2 n_e$$

$$R_2 = d_1 n_e + d_2 n_o$$

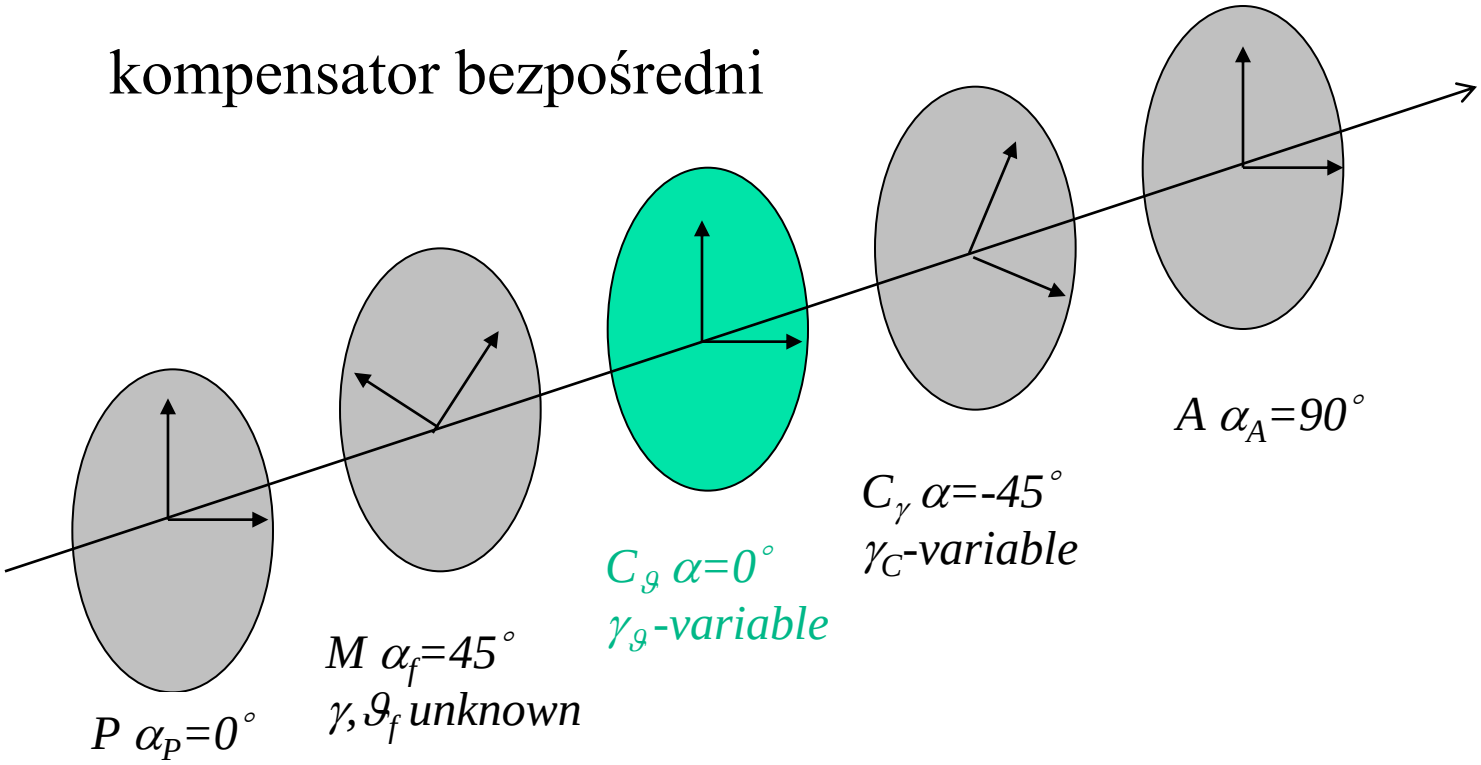
$$\Delta\varphi = 2\pi \frac{2\Delta n \cdot x \cdot \tan\alpha}{\lambda}$$

Kompensator Wollastona

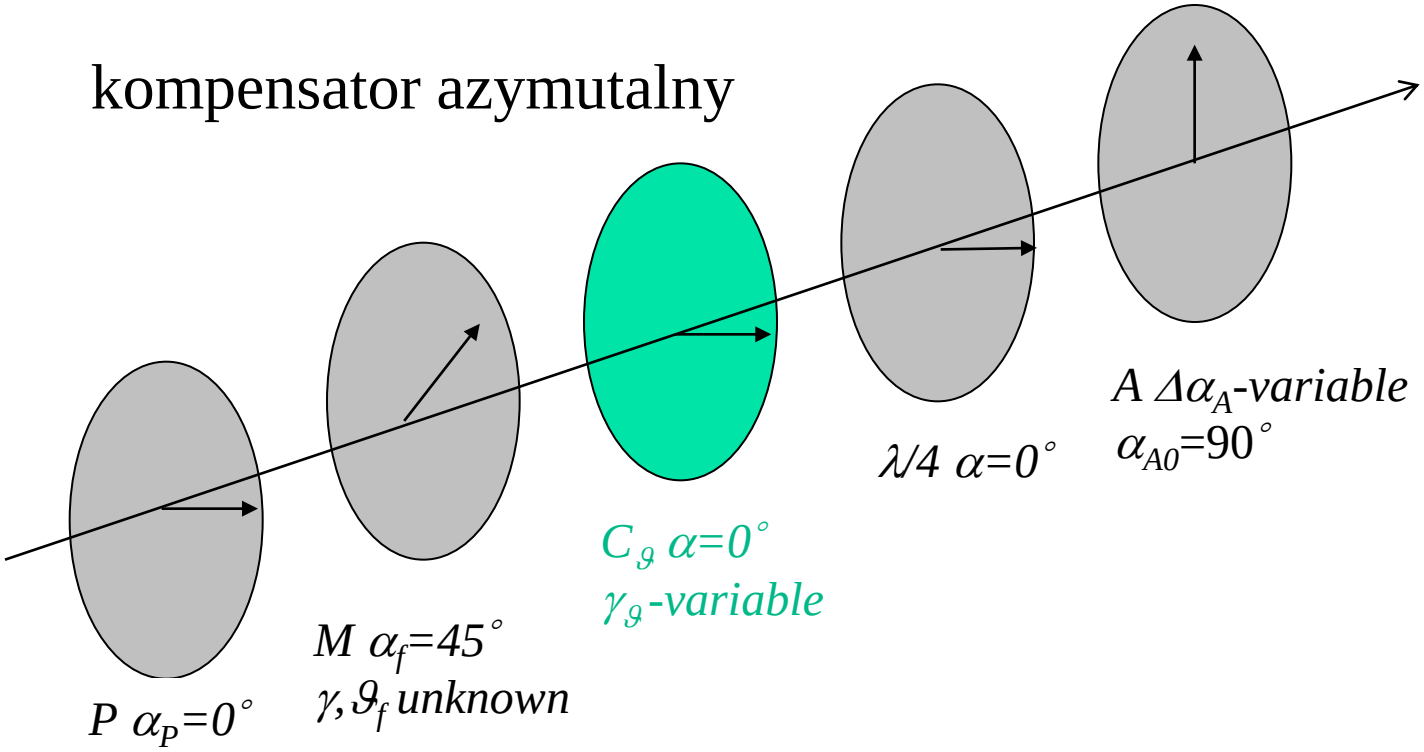


Kompensator bezpośredni - światło białe

Kompensatory a ośrodki eliptycznie dwójłomne



Kompensatory a ośrodki eliptycznie dwójłomne



Kompensatory a ośrodki eliptycznie dwójłomne

$$I_{out}(\gamma, \vartheta_f; \gamma_\vartheta; X) \propto 1 - \cos\gamma \cdot \cos X - \sin\gamma \cdot \sin X \cdot \cos(2\vartheta_f - \gamma_\vartheta)$$

$X = \gamma_K$ - kompensator bezpośredni

$X = 2\Delta\alpha_A$ - kompensator azymutalny

Dwa kompensatory:

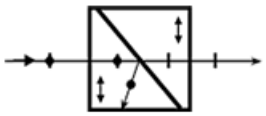
- kompensator eliptyczności $\gamma_\vartheta = 2\vartheta_f$
- kompensator różnicy faz $X = \gamma$

Kompensator Senarmonta dla ośrodków eliptycznie dwójłomnych

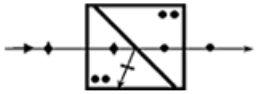
$$C\left(0^\circ,\gamma_\vartheta\right)+\frac{\lambda}{4}\left(0^\circ\right)\rightarrow C\left(0^\circ,90^\circ+\gamma_\vartheta\right)$$

$$P\left(0^\circ\right)\rightarrow M\left(45^\circ\right)\rightarrow C\left(0^\circ,90^\circ+2\vartheta_f\right)\rightarrow A\left(\Delta\alpha\right)$$

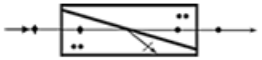
Pryzmaty polaryzujące



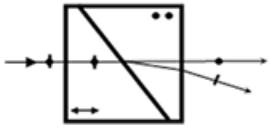
Glan-Taylor
Polarizing Prism



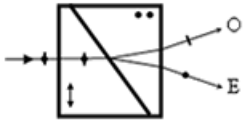
Glan-Foucault Prism



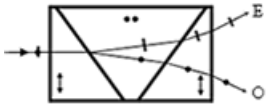
Glan-Thompson Prism



Rochon Polarizing Prism

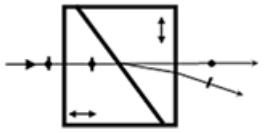


Wollaston
Polarizing Prism

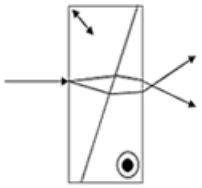


Double Wollaston
Polarizing Prism

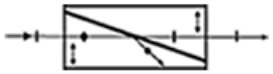
Pryzmaty polaryzujące



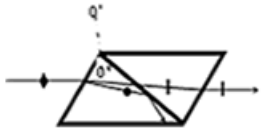
Senarmont Prism



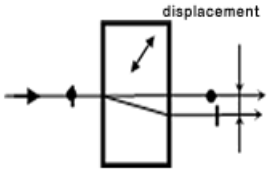
Nomarski Prism



Lippich Prism

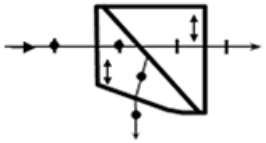


Nicol Prism

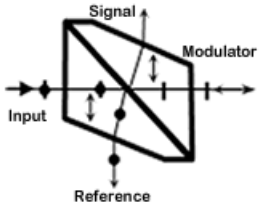


Parallel Polarizing Splitter

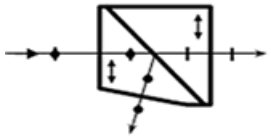
Pryzmaty polaryzujące



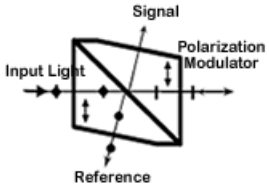
90 deg. Polarizing Splitter
(Single Side Window)



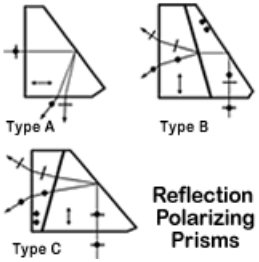
90 deg. Polarizing Splitter
(Dual Side Windows)



OE Double-Output Prism
(Single Side Window)



OE Double-Output Prism
(Dual Side Windows)



Reflection
Polarizing
Prisms