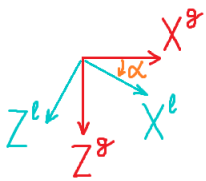


2 - KONCOVÉ SÍLY X Z M (DEFORMAČNÍ METODA)

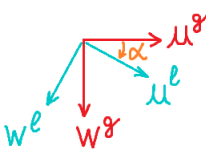
	V-V	V-K	K-V
$k = \frac{2EI}{L}$	$M_{ab} = \overline{M}_{ab} + k \cdot \left(2\varphi_a + \varphi_b + 3 \cdot \frac{w_b - w_a}{L} \right)$ $M_{ba} = \overline{M}_{ba} + k \cdot \left(\varphi_a + 2\varphi_b + 3 \cdot \frac{w_b - w_a}{L} \right)$	$M_{ab} = \overline{M}_{ab} + \frac{3k}{2} \left(\varphi_a + \frac{w_b - w_a}{L} \right)$	$M_{ba} = \overline{M}_{ba} + \frac{3k}{2} \left(\varphi_b + \frac{w_b - w_a}{L} \right)$
$k = \frac{2EI}{L}$	$Z_{ab} = \overline{Z}_{ab} - \frac{3k}{L} \left(\varphi_a + \varphi_b + 2 \cdot \frac{w_b - w_a}{L} \right)$ $Z_{ba} = \overline{Z}_{ba} + \frac{3k}{L} \left(\varphi_a + \varphi_b + 2 \cdot \frac{w_b - w_a}{L} \right)$	$Z_{ab} = \overline{Z}_{ab} - \frac{3k}{2L} \left(\varphi_a + \frac{w_b - w_a}{L} \right)$ $Z_{ba} = \overline{Z}_{ba} + \frac{3k}{2L} \left(\varphi_a + \frac{w_b - w_a}{L} \right)$	$Z_{ab} = \overline{Z}_{ab} - \frac{3k}{2L} \left(\varphi_b + \frac{w_b - w_a}{L} \right)$ $Z_{ba} = \overline{Z}_{ba} + \frac{3k}{2L} \left(\varphi_b + \frac{w_b - w_a}{L} \right)$
$n = \frac{EA}{L}$	$X_{ab} = \overline{X}_{ab} - n \cdot (u_b - u_a)$ $X_{ba} = \overline{X}_{ba} + n \cdot (u_b - u_a)$		



Transformace koncových sil

$$X^g = X^l \cdot \cos \alpha - Z^l \cdot \sin \alpha$$

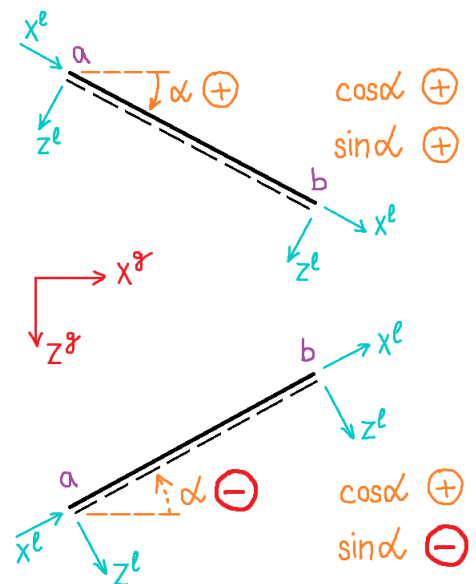
$$Z^g = X^l \cdot \sin \alpha + Z^l \cdot \cos \alpha$$



Transformace styčnickových posunů

$$u^l = u^g \cdot \cos \alpha + w^g \cdot \sin \alpha$$

$$w^l = -u^g \cdot \sin \alpha + w^g \cdot \cos \alpha$$



Příhradová konstrukce ($Z^l = 0$)

...vzorce pro globální síly a posuny

$$X_{ab} = n c^2 \cdot (u_a - u_b) + n c s \cdot (w_a - w_b)$$

$$Z_{ab} = n c s \cdot (u_a - u_b) + n s^2 \cdot (w_a - w_b)$$

...možno prohodit $a \leftrightarrow b$

$$n = \frac{EA}{L}$$

$$c = \cos \alpha$$

$$s = \sin \alpha$$