

$$\delta_{11}^* = \int \frac{I_c}{I} M_1^2 ds = \frac{4}{3} \cdot 1^2 = \frac{4}{3}$$

$$\delta_{12}^* = \int \frac{I_c}{I} M_1 M_2 ds = \frac{4}{6} (0(2 \cdot 1 + 0) + 1 \cdot (2 \cdot 0 + 1)) = \frac{4}{6} \cdot 1^2 = \frac{2}{3}$$

$$\delta_{13}^* = \int \frac{I_c}{I} M_1 M_3 ds = 0$$

$$\delta_{22}^* = \int \frac{I_c}{I} M_2^2 ds = 2 \cdot \frac{4}{3} \cdot 1^2 = \frac{8}{3}$$

$$\delta_{23}^* = \int \frac{I_c}{I} M_2 M_3 ds = \frac{4}{6} \cdot 1^2 = \frac{2}{3}$$

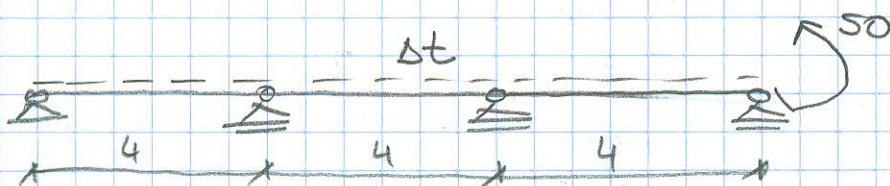
$$\delta_{33}^* = \int \frac{I_c}{I} M_3^2 ds = 2 \cdot \frac{4}{3} \cdot 1^2 = \frac{8}{3}$$

$$D = \frac{1}{EI_c} \begin{bmatrix} \delta_{11}^* & \delta_{12}^* & \delta_{13}^* \\ & \delta_{22}^* & \delta_{23}^* \\ & & \delta_{33}^* \end{bmatrix}$$

MATRICA D JE
SIMETRICNA

$$D = \frac{1}{EI_c} \begin{bmatrix} \frac{4}{3} & \frac{2}{3} & 0 \\ & \frac{8}{3} & \frac{2}{3} \\ & & \frac{8}{3} \end{bmatrix} = \frac{1}{EI_c} \begin{bmatrix} 1,3^\circ & 0,6^\circ & 0 \\ & 2,6^\circ & 0,6^\circ \\ & & 2,6^\circ \end{bmatrix}$$

SPOVAŽNJE OPTEREĆENJE:



M_0

$$\delta_{10}^* = \int \frac{I_c}{I} M_1 M_0 ds = 0$$

$$\delta_{20}^* = \int \frac{I_c}{I} M_2 M_0 ds = 0$$

$$\delta_{30}^* = \int \frac{I_c}{I} M_3 M_0 ds = \frac{4}{6} (1(2 \cdot 0 + 50) + 0(2 \cdot 50 + 0)) - \frac{4}{6} \cdot 1 \cdot 50 = \frac{100}{3}$$