

	$[m] = \frac{\rho I_x L_e}{6} \begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$	$I_p := \frac{1}{2} \cdot \pi \cdot \left( \left( \frac{R1}{2} \right)^4 - \left( \frac{R2}{2} \right)^4 \right)$ R:çap	
	$[k] = \frac{GI_t}{L_e} \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$	$I_p := \frac{1}{2} \cdot \pi \cdot \left( \frac{R}{2} \right)^4$	

$$k = \frac{EA}{L} \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}; m = \frac{\rho AL}{6} \begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}; |[K] - \omega^2 [M]| = 0; [F] = \int_0^L \begin{bmatrix} N_1 \\ N_2 \end{bmatrix} P dx;$$

$$[R] = [K][q] - [F]; \sigma = E[B][q]; B = \begin{bmatrix} -1 & 1 \\ L & L \end{bmatrix};$$

$$F_b^e = \frac{ALb}{2} \begin{Bmatrix} 1 \\ 1 \end{Bmatrix}; b = \rho g; T^e = \frac{TL}{2} \begin{Bmatrix} 1 \\ 1 \end{Bmatrix}; F_T^e = \frac{EA\alpha_T \Delta T}{2} \begin{Bmatrix} -1 \\ 1 \end{Bmatrix}$$

$$u(x, t) = N_1(x).q_1(t) + N_2(x).q_2(t);$$

$$N_1(x) = 1 - \frac{x}{L}; N_2(x) = \frac{x}{L}$$