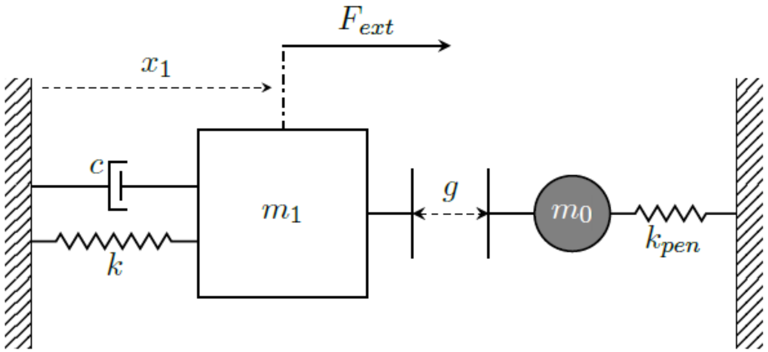
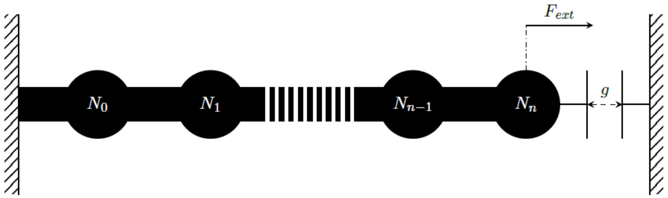


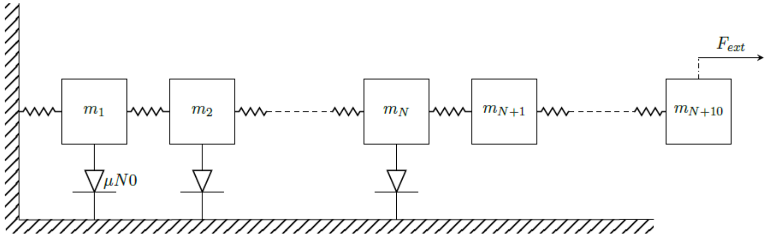
m_1	m_0	k	c	g	k_{pen}	F_{ext}
50	0	1e6	2e-1 $\cdot\sqrt{(m_1 \cdot k)}$	2e-5	1e8	10



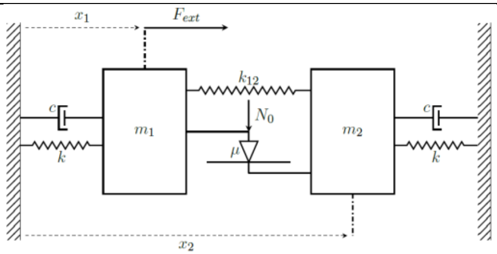
to add on the first coefficient of the global matrices. The damping matrix is obtained using the Rayleigh damping with ζ the damping factor and $\omega_0 = 65952$ [rad/s] the natural pulsation of the studied mode. The damping matrix is given by

$$\mathbb{C} = \zeta\omega_0\mathbb{M} + \frac{\zeta}{\omega_0}\mathbb{K}$$

ρ	A	E	L	N	$\mathbb{M}_e$	$\mathbb{K}_e$	ζ	g
7.8e3	15.6e-4	210e9	12.748e-2	20	$\frac{\rho AL}{3N}\begin{bmatrix} 1 & -\frac{1}{2} \\ -\frac{1}{2} & 1 \end{bmatrix}$	$\frac{EAN}{L}\begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$	8e-2	2e-4



m_j	c_j	k_j	μN	F_{ext}	N
1	1	1	0.3^2	0.1	$\{15, 40, 90, 290\}$



m_1	m_2	c	k	k_{12}	μN	F_{ext}
1	1	1e-02	1	1	0.15	1

All units are SI