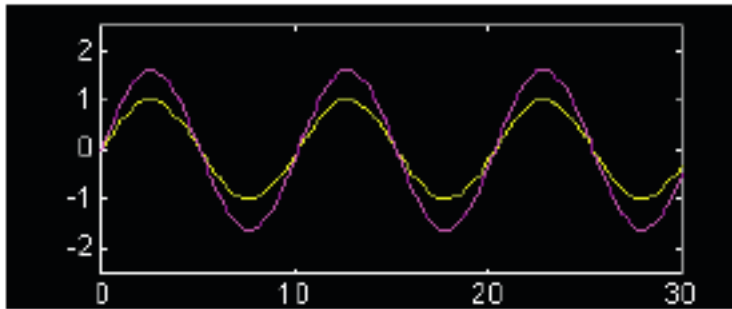


Superposition of Modes – Eigenvalue Problem

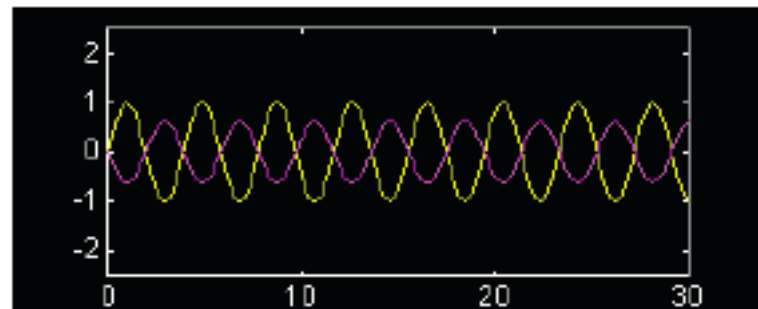
MODE 1

$$\mathbf{x} = \begin{Bmatrix} v_{n1} \\ v_{n2} \end{Bmatrix} = \begin{Bmatrix} 1 \\ 2 \end{Bmatrix} \sin t$$



MODE 2

$$\mathbf{x} = \begin{Bmatrix} v_{n1} \\ v_{n2} \end{Bmatrix} = \begin{Bmatrix} 1 \\ -1/2 \end{Bmatrix} \sin 2.4t$$



Superposition

$$\begin{Bmatrix} v_{m1} \\ v_{m2} \end{Bmatrix} = \begin{Bmatrix} 1 \\ -1/2 \end{Bmatrix} \sin 2.4t + \begin{Bmatrix} 1 \\ 2 \end{Bmatrix} \sin t$$

