



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Coimbatore-641035.



UNIT 2- Orthogonal Transformation of a Real Symmetric Matrix

Elastic Membrane

Elastic deformation

$(\cos \theta, 0)$

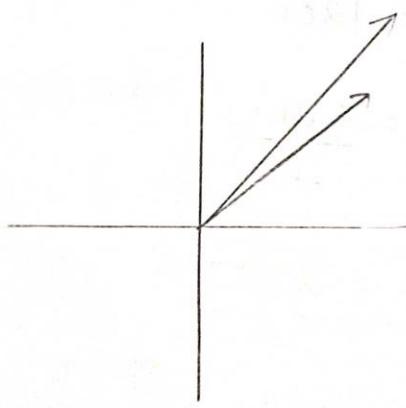
$y = A x$

$\xrightarrow{L} \text{eigen value}$

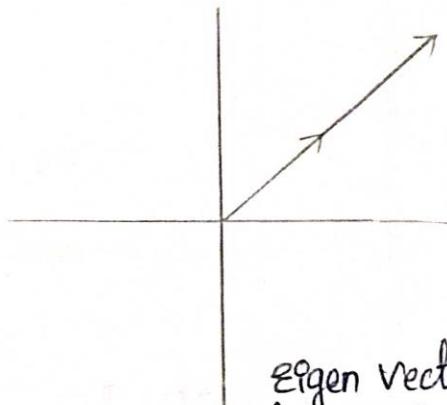
Stretching of an elastic membrane :-

⇒ elastic deformation :-

An object returns to its original shape when the forces are removed.



change in
magnitude and
direction



Eigen Vector
change in
magnitude & not
change direction