

Problem P2

The endpoints of the bar slide on the plane surfaces. Show that the acceleration of the midpoint G is related to the bar's angular velocity and angular acceleration by

$$\bar{a}_G = \frac{L}{2} [(\alpha \cos \theta - \omega^2 \sin \theta)\hat{i} - (\alpha \sin \theta + \omega^2 \cos \theta)\hat{j}]$$

