A cantilever:
1D force projection

$F_m = F_\perp$

F_{xy}
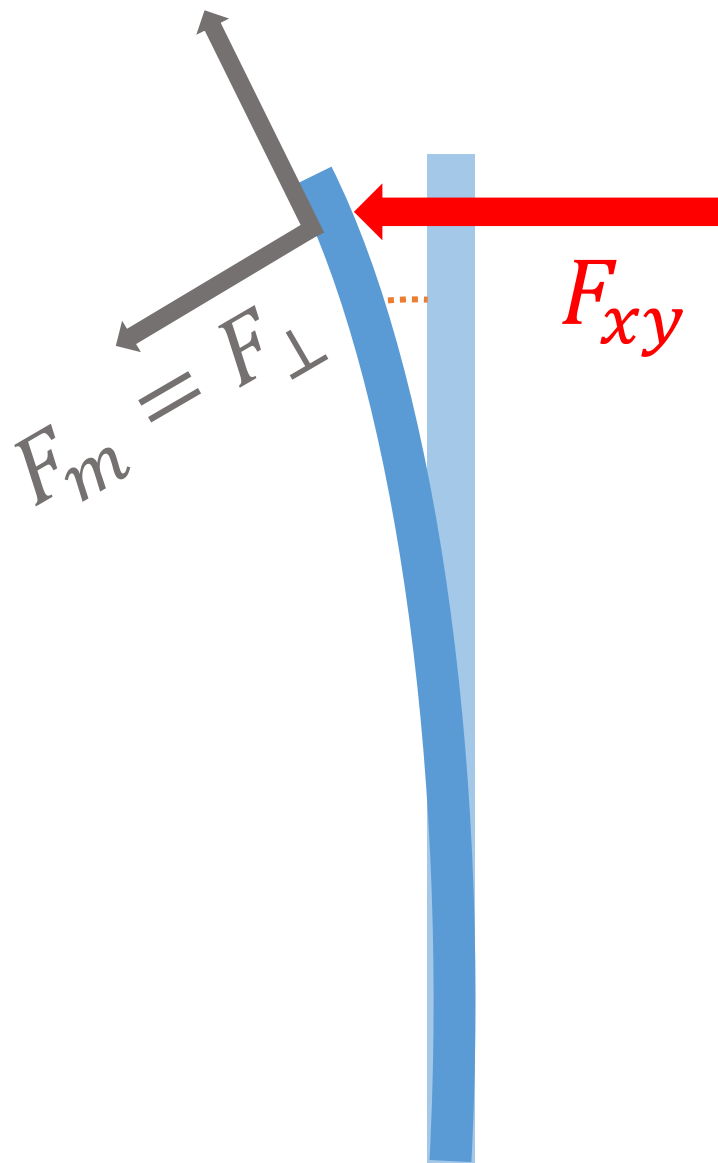
B pendulum:
2D force projection

$F_m = F_{xy}$

F_{xy}

$\hat{z}$

$\hat{x}$

$\hat{y}$