From HW ds:satellite.3, the linearized equations of motion are given by pmatrix$\ddot{\Theta}$

To find the transfer matrix from τ to $(\Theta, \Phi)^\top$, write Equation eq:soln$_c$6$_1$*and* $eq : soln_c6_2 in matrix formas \left(array c|cs^2\right.$

By dividing the bottom transfer function of the transfer matrix $\Phi(s)/\tau(s)$ by the top transfer function of the transfer matrix $\Theta(s)/\tau(s)$, we can find the transfer function from the satellite angular position to the panel angular position equation $\Phi(s)\Theta(s) = bJ_ps + kJ_ps^2 + bJ_ps + kJ_p\Theta(s).eq : soln_c6_4$