

-0 -1 al angle angular apogee around behaviour calculated cartmell **case** centre change  
**com** conditions constructing control coordinate **COS** deployment different doi  
dynamics earth **energy equations** et facility **figure** force generalised given  
gives http **inclination** increase inertial initial I1 I2 lagrange launch length local lunar m2  
**mass** maximum method mfacility mission mmet model momentum motion motor  
movement mrobot mtether **orbit** out-of-plane parameters payload phase plane plots  
point position potential r2 rad radius recovery release robot **rotation** satellite section  
shown **sin** space space-web stability stress structure symmetrical **system**  
table tension terms **tether** therefore torque url used vector velocity vs  
**web**<sub>yz</sub>