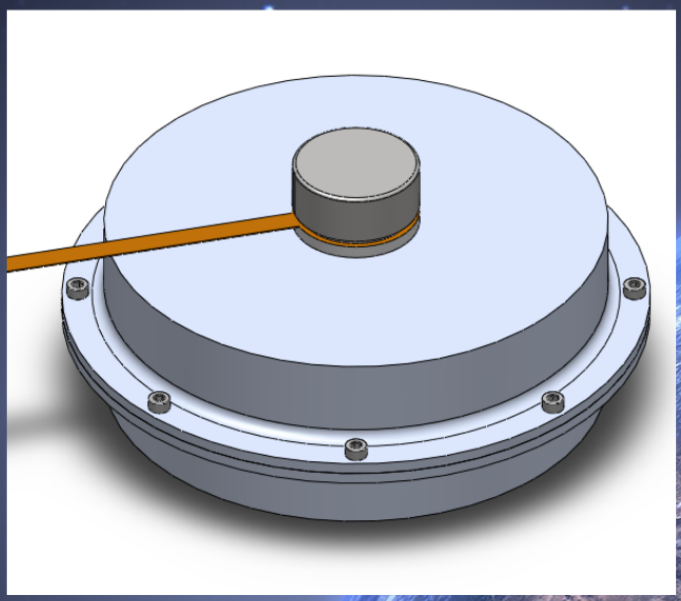
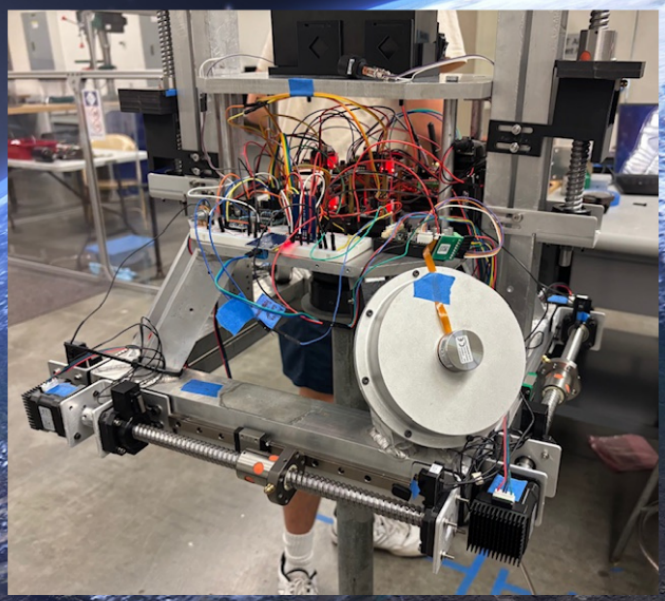
DEVELOPMENT OF A REACTION WHEEL SYSTEM FOR CAL POLY'S SPACECRAFT ATTITUDE DYNAMICS SIMULATOR





Monday, June 9th at 10AM in Aerospace Conference Room

The Cal Poly Spacecraft Attitude Dynamics Simulator (SADS) is an ongoing project to develop a system capable of simulating the attitude dynamics and kinematics of a rigid body in space. Actuations on the SADS are performed by reaction wheels, however the current reaction wheels have various issues that decrease system performance and are not independent of the SADS. The reaction wheel developed as part of this thesis will be designed to improve performance and with design specification tailored to the SADS, serve as an independent assembly that can be transferred to other systems, and provide a general outline for reaction wheel development for any system.