

**INVESTIGATION TRACTION SYSTEM DEVELOPMENT FOR LUNAR MOBILITY.** Peter Radziszewski, Brad Jones, Mo Farhat, Department of Mechanical Engineering, McGill University, Neptec Design Group, Canadian Space Agency

With the initiation of a planetary mobility program at the Canadian Space Agency, it became important to address the development of some capacity for the development and investigation of vehicle traction systems. Neptec Design Group, through the Partnership Support Program and the NSERC CRD program, initiated a study on traction system development with the goal to define a methodology

for the design of traction systems for lunar mobility. In this paper, an overview of the facilities being developed both physical and virtual as well as some conceptual wheel designs will be made. It will also include the resulting investigation and performance measures of a reduced scale concept wheel designs dubbed “iRings”.