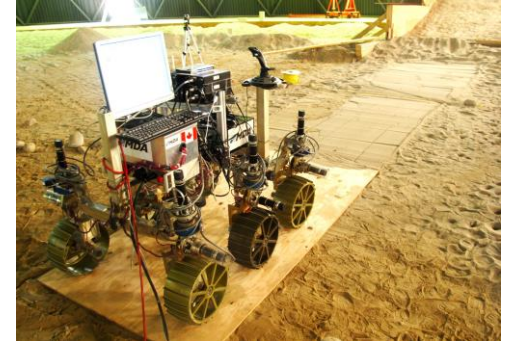


Effect of Normal Force Dispersion on the Mobility of Wheeled Robots Operating on Soft Soil

Bahareh Ghotbi, Francisco González,
József Kövecses and Jorge Angeles
Mechanical Engineering, McGill University, Canada

- The effect of the normal force distribution on the traction capability at wheel-terrain contact is the subject of the paper
- The study is extended to the case of wheeled robots operating on soft soil
- A performance indicator based on the distribution of normal load among the wheels of robot is defined
- Conditions under which the change of this indicator has significant effect on rover mobility are identified



Rover Chassis Prototype
used for the experiments