

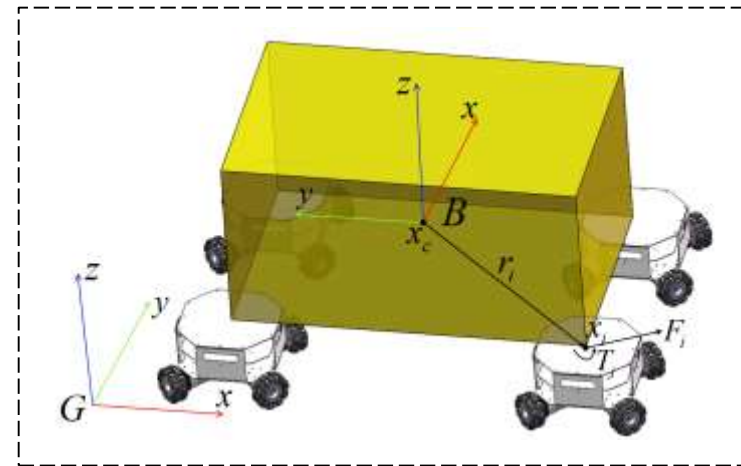
Distributed Adaptive Control of Multiple Robots for Cooperative Load Transportation

Bo Zhang, Pudong Liu, Runhao Xi, Youqiang Ye and Shiyu Chen
College of Mechatronics and Control Engineering, Shenzhen University, China

Yao Cui

Research & Development Institute of Northwestern Polytechnical University In
Shenzhen, China

- An adaptive control (MRAC) method based on model reference is proposed.
- The common load state space model of multiple omnidirectional mobile robots is established.
- The controller of automatic adjustment of control parameters is designed to approach the reference model.
- Prior knowledge of robot position and load characteristics is not needed to control the robots transport load.



Multi-robot transport system