

Decentralized Ability-Aware Adaptive Control for Multi-robot Collaborative Manipulation

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- Define a **nominal task ellipsoid** and optimize the **force capability** of each robot.
- Design a **decentralized adaptive controller** under **limited communication** and **input constraints** to be Lyapunov stable.
- Different **heterogeneous multi-robot systems** realize collaborative manipulation tasks irrespective of the low-level controllers.

