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Distributed formation building algorithms for groups of wheeled mobile robots

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- We present a method for decentralized flocking and global formation building for a network of unicycle-like robots.
- These robots are described by the standard kinematic equations with hard constraints on the robots linear and angular velocity
- We prove the convergence of the proposed algorithm with probability 1.
- The effectiveness of the proposed control algorithm is illustrated via computer simulations and experiments with real robots

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