

Information Transfer in Decentralized Robotic Swarm with Noisy Communication

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Abstract:

The newly emerging decentralized multi-robotic systems open new exciting possibilities for many areas of research, industry and every-day life. One of the issues for swarm robotics is that the communication within the robotic swarm is often noisy and a degree of imprecision has to be accepted in order to maintain the highly-demanded robustness and fast self-organizing capability of the swarm.

The goal of the work is to developed communication algorithms for highly efficient self-organizing robotic systems with large number of robotic units using a noisy communication channel.

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