Active Target Tracking with Self-Triggered Communications

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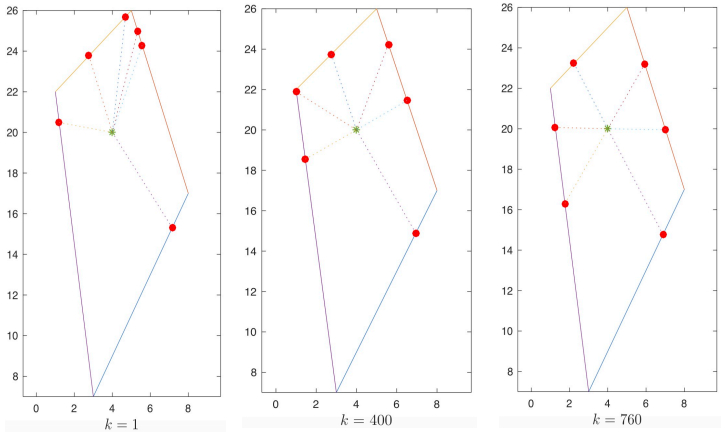
- We study the problem of reducing communications for multi-robot target tracking.
- The robots need to exchange information to coordinate their actions.
- We propose a self-triggered communication strategy that decides when robots should seek up-to-date information from their neighbors.
- We prove that the self-triggered strategy converges to the optimal configuration.



Self-triggered tracking with six robots moving on the boundary of a convex polygon with a known, stationary target.