

Evacuation Problem: a Generalization of Search Problems

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We consider mobile robots located in some environment. They all need to reach, in a cooperative manner, a target at an unknown location, called by obvious analogy the *exit*. Unlike in the traditional search, we need to minimize the time needed by the *last* robot to reach the exit. We consider two possibilities of exchanging information among the robots: face to face, where some robots meet, or wireless communication among all of them. The evacuation problem turns to be quite challenging in either case, even for two robots in some simple environments. Many open problems remain.

Keywords: Mobile Robots, Search, Communication, Evacuation