Resilient Active Target Tracking with Multiple Robots

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- **Problem:** Deploy mobile robots to enable active multi-target tracking despite attacks to robots.
- **Sensing & Tracking:** Each robot has a tracking sensor, (e.g., a camera), and a set of candidate trajectories from which it must choose one. Each trajectory covers a number of targets.
- **Attack:** Targets can block the field-of-views of a worst-case subset of robots.
- **Objective:** Maximize the number of targets covered (submodular) subject to the worst-case attack.
- **Contribution:** Propose the first resilient algorithm with provable performance guarantees, and with running time quadric in the number of robots.