Information Gathering Schemes
for Collaborative Sensor Devices

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Abstract
We develop a novel information gathering scheme for Wireless Sensor Networks (WSNs) in which we consider $n$ sensor nodes distributed randomly in a certain field to measure a physical phenomena. We desire to disseminate nodes’ data throughout the network such that a base station will be able to collect the sensed data by querying a small number of nodes. We propose a data dissemination and collection scheme to solve this problem, and we also present simulation results and derived bounds of this scheme.

Keywords
Data Collection Algorithms; Data Dissemination; WSNS