| | |
|---|---|
| agents | $1, 2, \ldots, n$ |
| time | $t \in \{0, 1, 2, \ldots\}$ |
| true state | $\mu \in (0, 1)$ |
| belief of agent $i$ at $t$ | number between $0$ and $1$<br>drawn from a distribution with mean $\mu$<br>and finite variance above a threshold $\delta > 0$ |
| social network | aperiodic, strongly connected directed graph with agents as vertices,<br>and who-pays-attention-to-who as edges |
| agent $i$'s neighborhood | agents that $i$ pays attention to |
| weight on edge from $i$ to $j$ | number that indicates how much weight $i$ places on $j$'s opinion;<br>we assume $i$ distributes a total weight of $1$ across $i$'s neighborhood |
| update rule | at time $t + 1$ every agent updates their belief<br>to a weighted average over the beliefs of neighbors |