Topology-Aware Gossip

- Network topology is hierarchical

- Random gossip target selection => core routers face O(N) load (Why?)

- Fix: In subnet i, which contains n_i nodes, pick gossip target in your subnet with probability $(1-1/n_i)$

- Router load=O(1)

- Dissemination time=O(log(N))

N/2 nodes in a subnet

Router

N/2 nodes in a subnet