

Title: Self-stabilizing networks with constant diameter
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Consider the self-stabilizing clique: We can route packages to their targets in a constant amount of hops. The drawback for the clique is the high node degree. We want to design a self-stabilizing protocol for topologies, which have a lower degree ($\mathcal{O}(\sqrt[d]{n})$, d is a constant), but still are able to route packages in a constant amount of hops ($\mathcal{O}(d)$).

We consider two topologies: The q -ary d -dimensional hypercube and the q -ary d -dimensional hypercube. For the latter topology, we will present a self-stabilizing protocol and explain its routing algorithm.