

## Nowhere-zero 5-flows

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Tutte's 5-Flow Conjecture from 1954 states that every bridgeless graph has a nowhere-zero 5-flow. We prove that every cyclically 6-edge-connected cubic graph with oddness at most 4 has a nowhere-zero 5-flow. Therefore, every possible minimum counterexample to the 5-flow conjecture has oddness at least 6.