ANTHONY BONATO, X University
New and improved bounds on the burning number of a graph

The burning number conjecture states that the burning number of a connected graph is at most $\lceil \sqrt{n} \rceil$. Using an algorithmic approach, we provide the best known upper bound for the burning number of a connected graph:

$$\left\lceil \frac{\sqrt{12n + 64} + 8}{3} \right\rceil = \sqrt{(4/3)n} + O(1).$$