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**Huiqing Liu\*** (hqliu@hubu.edu.cn), Wuhan, Hubei prov 430062. *Burning number of theta graphs*. Preliminary report.

The burning number  $b(G)$  of a graph  $G$  was introduced by Bonato, Janssen, and Roshanbin [Lecture Notes in Computer Science 8882(2014)] to measure the speed of the spread of contagion in a graph. The graph burning problem is NP-complete even for trees. In this paper, we show that the burning number of any theta graph of order  $n = q^2 + r$  with  $1 \leq r \leq 2q + 1$  is either  $q$  or  $q + 1$ . Furthermore, we characterize all theta graphs that have burning number  $q$  or  $q + 1$ . (Received January 25, 2019)