

**Goedgebeur, Jan; Zamfirescu, Carol T.**

**Infinitely many planar cubic hypohamiltonian graphs of girth 5.** (English) Zbl 1391.05153  
J. Graph Theory 88, No. 1, 40-45 (2018).

Summary: A graph  $G$  is hypohamiltonian if  $G$  is non-Hamiltonian and for every vertex  $v$  in  $G$ , the graph  $G - v$  is Hamiltonian. *B. D. McKay* [J. Graph Theory 85, No. 1, 7-11 (2017; [Zbl 1365.05064](#))] asked whether infinitely many planar cubic hypohamiltonian graphs of girth 5 exist. We settle this question affirmatively.

**MSC:**

[05C45](#) Eulerian and Hamiltonian graphs

[05C10](#) Planar graphs; geometric and topological aspects of graph theory

Cited in **3** Documents

**Keywords:**

cubic; dot product; Hamiltonian graph; hypo-Hamiltonian graph

**Full Text:** [DOI](#)