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Five-connected toroidal graphs are Hamiltonian. (English) [Zbl 0867.05043](#)

J. Comb. Theory, Ser. B 69, No. 1, 79-96 (1997).

We prove that every edge in a 5-connected graph embedded in the torus is contained in a Hamilton cycle. Our proof is constructive and implies a polynomial time algorithm for finding a Hamilton cycle.

Reviewer: X.Yu (Atlanta)

MSC:

[05C45](#) Eulerian and Hamiltonian graphs

[05C38](#) Paths and cycles

[05C40](#) Connectivity

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

Cited in **1** Review
Cited in **20** Documents

Keywords:

Tutte path; connectivity; representativity; torus; Hamilton cycle; polynomial time algorithm

Full Text: [DOI](#)