

# *Finding Hamiltonian Circuits in Quasi-Adjoint Graphs*

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## **Abstract**

The Hamiltonian Circuit problem is one of the most famous NP-complete problems in Graph Theory. It is therefore interesting to find particular classes of graphs for which this problem is polynomial.

In (Blazewicz, Kasprzak 2006), the authors show such a class of graphs. Here, we present a generalisation of these graphs and, using a new algorithm, we show that it is still possible to solve the Hamiltonian Circuit problem in polynomial time in the general class.