

# Ptolemaic Graphs are Cycle Extendible

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A cycle is extendible if there exists another cycle on the same set of vertices plus one more vertex. G.R.T. Hendry conjectured (1990) that every non spanning cycle in a Hamiltonian chordal graph is extendible. This has been shown to be true for some subclasses of chordal graphs including planar chordal graphs (2002), interval graphs, strongly chordal graphs with (two specific) forbidden subgraphs, split graphs (2006), and spider intersection graphs (2013). We verify it for Ptolemaic graphs.