1003-05-50 **Atif Abueida** and **R. Sritharan*** (`rst@cps.udayton.edu`), Department of Computer Science, 300 College Park, University of Dayton, Dayton, OH 45469. *Cycle extendability in chordal graph classes.*

Cycle C in a graph is *extendable* if there exists a cycle C' such that $V(C) \subseteq V(C')$ and $|V(C')| = |V(C)| + 1$. A graph is *cycle extendable* if every non-Hamiltonian cycle in the graph is extendable. An unresolved question is whether or not every Hamiltonian chordal graph is cycle extendable. We show that Hamiltonian graphs in some subclasses of chordal graphs, such as interval graphs, are cycle extendable. Our techniques rely on the theory of chordal graph classes. (Received July 12, 2004)