

Abstract

A nonhamiltonian cycle C in a digraph is called extendable, if there exists another cycle C_0 , whose vertex set consists of $V(C)$ and one more vertex. Path extendability is defined similarly, with an additional requirement that the endvertices remain unchanged. Cycle extendability and path extendability are strengthening of pancyclicity and panconnectedness, respectively. In this talk, I will report some of our recent works on paths and cycles of every length in digraphs, particularly on cycle extendability and path extendability.