

Title: Recent results on Hamiltonian cycle enumeration

Abstract: We present some recent results on the enumeration of Hamiltonian cycles. In the first part of the talk, enumerative versions of classical theorems of Whitney and Tutte on Hamiltonian cycles in planar graphs are discussed; the second part deals with a concept generalising the independence number and its connection to Hamiltonian cycles; and the third part revolves around squares of 2-connected and an enumerative strengthening of a celebrated theorem of Fleischner.

