
KATHIE CAMERON, Wilfrid Laurer University
Hadwiger's Conjecture for (Cap, Even Hole)-Free Graphs

A minor of a graph G is obtained from a subgraph of G by contracting edges. In 1943, Hadwiger made his famous conjecture (HC): For every integer $t \geq 0$, every graph with no K_{t+1} minor is t -colourable. Hadwiger proved the conjecture for $t = 3$. For $t = 4$, it is equivalent to the Four Colour Theorem. Robertson, Seymour and Thomas proved it for $t=5$. For $t \geq 6$, it remains open. Chudnovsky and Fradkin proved HC for quasi-line graphs. We prove HC for (cap, even hole)-free graphs, and for some related classes of graphs. This is joint work with Kristina Vušković.