ROSE MCCARTY, University of Waterloo
Vertex-Minors and Circle Graphs

A vertex-minor of a graph G is a graph which can be obtained from G by deleting vertices and performing local complementations; locally complementing at a vertex v replaces the induced subgraph on the neighborhood of v by its complement. For circle graphs, locally complementing corresponds to a natural operation on chord diagrams. We discuss the role that circle graphs play in studying vertex-minors. In particular, we discuss a theorem which says that every "non-decomposable" class of graphs contains all circle graphs as vertex-minors. Joint work with Jim Geelen, O-joung Kwon, and Paul Wollan.