

1151-13-272

**Branden Stone\*** (bstone@hamilton.edu) and **Charlie Miller** (cwmiller@hamilton.edu).

*Classifying Nearly Complete Intersection Graphs*. Preliminary report.

In recent work, Boocher and Seiner defined a new class of monomial ideals, nearly complete intersections (NCI). With these new ideals, they were able to determine lower bounds for betti numbers of monomial ideals. Our work attempts to classify these ideals using simply connected graphs. In the homogeneous degree 2 case, a complete classification of NCI ideals is given by graphs and edge ideals. In the general case, examples of NCI hypergraphs have been obtained. (Received August 20, 2019)