Courtney R Gibbons\* (crgibbon@hamilton.edu), Hamilton College, 198 College Hill Road, Clinton, NY 13323, and Chiara Bondi, Yuye Ke, Spencer Martin, Shrunal Pothagoni and Andrew Stelzer. A Hypergraph Characterization of Nearly Complete Intersections.

Recently, nearly complete intersection ideals were defined by Boocher and Seiner to establish lower bounds on Betti numbers for monomial ideals (arXiv:1706.09866). Stone and Miller then characterized nearly complete intersections using the theory of edge ideals (arXiv:2101.07901). The authors extend their work to fully characterize nearly complete intersections of arbitrary generating degrees and use this characterization to compute minimal free resolutions of nearly complete intersections from their degree 2 part. This work was initiated as part of the virtual COURAGE REU in Summer 2020, supported by Clemson University's School of Mathematical and Statistical Science. (Received March 04, 2021)