1136-05-580 **Anton Dochtermann*** (dochtermann@txstate.edu), San Marcos, TX. *Chordal graphs, linear quotients, and spanning complexes for data clustering.* Preliminary report.

Notions of chordal graphs and complexes have played a central role in combinatorial commutative algebra. Recently Culberson, Guralnik, and Stiller give a new characterization of chordal graphs in terms of sequences of 'edge-erasures'. Their motivation came from data clustering and algorithms for finding minimal spanning complexes that generalize the minimal spanning trees involved in 'single-linkage clustering'. We give a simple algebraic proof of their result and illustrate some consequences of this new perspective. We discuss how the algebraic approach may provide insight into spanning complexes for other clustering methods. (Received January 22, 2018)