1145-13-1060 Joe A. Stickles, Jr.* (jstickles@millikin.edu). Graphs and Commutative Rings.

Nearly twenty years ago Anderson and Livingston published their paper on zero-divisor graphs of commutative rings. Since then hundreds of papers concerning graphical structures associated with algebraic objects have been published, and many of the results were produced by undergraduates. In this talk, we will focus on three specific structures: zero-divisor graphs, ideal-divisor graphs, and irreducible divisor graphs. Student results and avenues for future research will be discussed. (Received September 18, 2018)