1077-13-535   **M Axtell** (`axte2004@stthomas.edu`), St. Paul, MN 55105, **N Baeth*** (`baeth@ucmo.edu`), W.C. Morris 213, Warrensburg, MO 64093, and **J Stickles** (`jstickles@millikin.edu`), Decatur, IL 62522. *Cut Structures in Zero-divisor Graphs.*

Zero-divisor graphs and, more recently, compressed zero-divisor graphs are well-represented in the commutative ring literature. In this talk we consider various cut structures — sets of edges or vertices whose removal disconnects the graph — in both compressed and non-compressed zero-divisor graphs. In doing so, we connect these graph-theoretic concepts with algebraic notions and provide realization theorems for zero-divisor graphs over commutative rings with identity. (Received September 06, 2011)