1024-13-73 **David F. Anderson*** (anderson@math.utk.edu), Mathematics Department, Ayres Hall, University of Tennessee, Knoxville, TN 37996. *The zero-divisor graph of a commutative ring.* Preliminary report.

Let R be a commutative ring with Z(R) its set of zero-divisors. The zero-divisor graph of R has Z(R) - 0 as its set of vertices, and distinct vertices x and y are adjacent if and only if xy = 0. We will discuss some recent results on the diameter and girth of zero-divisor graphs. Part of this is (separate) joint work with S. B. Mulay and A. Badawi. (Received December 29, 2006)