John D. LaGrange* (lagrange@math.utk.edu), The University of Tennessee, Department of Mathematics, 124 Ayres Hall, Knoxville, TN 37996. The Zero-Divisor Graph of a Maximal Ring of Quotients.

The maximal ring of quotients Q(R) of a ring R is a generalization of its total quotient ring T(R). Although it is always true that the zero-divisor graph of a commutative ring is isomorphic to that of its total quotient, it may happen that it is not isomorphic to the zero-divisor graph of its maximal ring of quotients. We will discuss a particular invariant of the zero-divisor graph of Q(R), where R is a reduced commutative ring. (Received December 15, 2006)