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Jim Coykendall* (jim.coykendall@gmail.com), Department of Mathematics, North Dakota State University, Fargo, ND 58108. *Atomicity and Near Atomicity*.

We say that an integral domain is atomic if every nonzero, nonunit can be written as a product of irreducible elements (atoms). In this talk we will look at atomic, “nearly atomic”, and more specialized conditions from a number of points of view (both element-wise and graph-theoretic). We will also delve into some of the difficulties encountered when the assumption “integral domain” is removed. (Received September 23, 2012)