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**David E. Dobbs** and **Jay Shapiro\*** ([jshapiro@gmu.edu](mailto:jshapiro@gmu.edu)), Department of Mathematics, George Mason University, Fairfax, VA 22030. *A classification of the minimal ring extensions of an integral domain.*

Let  $R$  be any integral domain. We show that the minimal (commutative unital) ring extensions  $S$  of  $R$  are, up to  $R$ -algebra isomorphism, of three non-overlapping types: (i) the domains  $S$  that contain  $R$  and are minimal ring extensions of  $R$ ; (ii) the idealizations  $R(+R/M$  arising from maximal ideals  $M$  of  $R$ ; and (iii) the direct products  $R \times R/M$  arising from maximal ideals  $M$  of  $R$ . (Received September 21, 2005)