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W. D. Burgess* (wburgess@uottawa.ca), Department of Mathematics and Statistics, University of Ottawa, Ottawa, ON K1N 6N5, Canada. *On commutative clean rings*. Preliminary report.

Commutative clean rings are the commutative exchange rings and can also be thought of as the local ring objects in the category of commutative rings. (A ring R is *clean* if for each $r \in R$ there are an idempotent e and a unit u such that $r = u + e$.) These rings and two generalizations, *almost clean* and *weakly clean* rings, are studied from the point of view of a sheaf over the spectrum of their boolean algebra of idempotents. This is a natural approach because idempotents play such an important role in this context. (Received February 19, 2007)