1067-AD-1314 **Stefaan Caenepeel*** (`scaenepe@vub.ac.be`), Pleinlaan 2, B-1050 Brussels, Belgium. *Corings and descent theory.*

Corings are algebras (or monoids) in the opposite of the category of bimodules over a ring. We present several examples, and introduce the notion of grouplike element. A Galois coring is a coring with a grouplike element, such that a certain map, called the canonical map is bijective. The definition is motivated using descent theory, and can be used to provide an elementary reformulation of Galois descent theory and some of its generalizations. (Received September 21, 2010)