Questions and counterexamples on strongly clean rings

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Recall that an element of a ring is said to be strongly clean if it can be written as the sum of an idempotent and a unit that commute. The behavior of strong cleanness with respect to power series rings (and, more generally, rings complete with respect to an ideal) has been studied by many authors over the past 15 years or so. We will present a counterexample about strongly clean elements in power series rings, and present some related open questions.

²⁰¹⁰ Mathematics Subject Classification. .