Danielson Melo Filho

Universidade Federal do Ceará, Brazil

danielsonfilho@hotmail.com

A ring is said to be clean if each element in the ring can be written as the sum of a unit and an idempotent of the ring. The notion of a clean ring was introduced in 1977 by Nicholson in his study of lifting idempotents and exchange rings, and these rings have since been studied by many different authors.

In this poster, we present some properties and examples of clean rings, and then we classify the rings that consist entirely of units, idempotents, and quasiregular elements and we also consider the problems of classifying the groups G whose group rings RG are clean for any clean ring R.

Joint work with Rodrigo Lucas Rodrigues (Universidade Federal do Ceará).