1015-16-229 Carla Petroro and Markus Schmidmeier* (markus@math.fau.edu). Abelian groups with a p^2 -bounded subgroup, revisited.

Let Λ be a commutative local uniserial ring of length n and p a generator of the maximal ideal. We consider all pairs (B, A) where B is a finitely generated Λ -module and A a submodule of B such that $p^2 A = 0$.

Each pair (B, A) has a unique decomposition into indecomposable ones; in this manuscript we use linear algebra to obtain the list of all possible indecomposable summands.

As an application, we recover the known classification of all pairs (B, A) where B is a finitely generated abelian group and A a subgroup of B which is p^2 -bounded for a given prime number p.

This is a report on joint work with Carla Petroro (Received February 06, 2006)