NEW TRENDS IN RINGS AND MODULES I
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ON δ-SEMIPERFECT MODULES

M. Tamer Koşan
(based on a joint work with Hau Xuan Nguyen and Yiqiang Zhou [3])

Gebze Technical University, Turkey

Abstract. A submodule N of a module M is δ-small in M if $N+X \neq M$ for any proper submodule X of M with M/X singular ([4]). A projective δ-cover of a module M is a projective module P with an epimorphism to M whose kernel is δ-small in P. A module M is called δ-semiperfect if every factor module of M has a projective δ-cover. In this presentation, I will mention various properties, including a structure theorem and several characterizations, for δ-semiperfect modules. Our proofs can be adapted to generalize several results of Mares ([1]) and Nicholson ([2]) from projective semiperfect modules to arbitrary semiperfect modules.

References

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[2] W. K. Nicholson: *On semiperfect modules,* Canad. Math. Bull. **18** (1) (1975), 77-80.

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E-mail address: mtkosan@gtu.edu.tr tkosan@gmail.com.