

On Finite-direct-injective modules

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a joint work with

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Abstract

A module M is called a Finite-direct-injective module if every finitely generated submodule of M isomorphic to a direct summand of M is itself a direct summand of M . It is a generalization of direct-injective module. In this talk, we discuss some properties of finite –direct- injective modules and characterize some rings in terms of finite –direct-injective modules.

Keywords

C2-module, C3-module, finite-direct-injective module, regular right FGC-ring.

References

- [1] M. Alkan and A. Harmanci, On summand sum and summand intersection property of modules, *Turkish J. Math.*, 26(2) (2002), 131-147.
- [2] Amin, Y. Ibrahim and M. Yousif, C3-modules, *Algebra Colloq.* 22 (2015) 655–670.
- [3] M. Behboodi and G. Behboodi Eskandari, On rings over which every finitely generated module is a direct sum of cyclic modules, *Hacettepe J. Math. Statist.* 45(5) (2016) 1335–1342.
- [4] V. Camillo, Y. Ibrahim, M. Yousif and Y. Zhou, Simple-direct-injective modules, *J. Algebra*, 420 (2014), 39-53.
- [5] J. L. Garcia, Properties of direct summands of modules, *Comm. Algebra*, 17(1) (1989), 73-92.
- [6] G. Lee, S. T. Rizvi and C. S. Roman, Modules whose endomorphism rings are von Neumann regular, *Commun. Algebra* 41 (2013) 4066–4088.

- [7] G. Lee, S. T. Rizvi and C. S. Roman, Dual Rickart modules, *Comm. Algebra*, 39(11) (2011), 4036-405,
- [8] Sanjeev Kumar Maurya and A J Gupta, Finite-direct-injective modules, *International Electronic journal of Algebra*, Vol 23 (2018) 143-152.
- [9] S K Maurya and A J Gupta, Characterization of rings using finite direct injective modules, *Asian European journal of Mathematics*, Vol 13, No, 7 (2020) 2050133-41
- [10] S. H. Mohamed and B. J. Müller, *Continuous and Discrete Modules*, London Mathematical Society Lecture Note Series, 147, Cambridge University Press, Cambridge, 1990.
- [11] R. Wisbauer, *Foundation of Module and Ring Theory* (Gordon and Breach, Philadelphia 1991).