

Some results on torsionfree modules

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Abstract. We study torsionfree and divisible dimensions in terms of right derived functors of $-\otimes-$. We also investigate the cotorsion pair cogenerated by the class of cyclic torsionfree right R -modules. As applications, some new characterizations of von Neumann regular rings, F -rings and semisimple Artinian rings are given.

This talk is a report on joint work with Jiangsheng Hu.
