

On some variants of chain conditions

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a joint work with

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Abstract

We are familiar with the great contribution of Noether and Artin in the study of ACC and DCC on ideals (submodules) in a ring (in a Module). Several people studied the classes of modules with ACC or DCC on different families of their submodules. In 2016, Alberto Facchini and Nazemian thought differently to generalize these notions. They studied the modules with chain conditions upto isomorphism. They call these modules by iso-Noetherian and iso-Artinian modules. In the present talk, we discuss various generalizations studied by us recently. In particular, the classes of mono-Artinian (mono-Noetherian) modules; nei-Noetherian (nei-Artinian) and ei-Noetherian (ei-Artinian) modules, in these notions, we consider the chain of non essential and essential submodules, respectively. We discuss some new properties of nei-Noetherian and nei-Artinian modules. Also, we investigate these chain conditions on semiprime rings.

Keywords

Iso-Artinian rings; Iso-Noetherian rings; nei-Noetherian modules, ei-Noetherian modules.

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