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Abstracts of Short Communications and Posters

Section:

2. Algebra

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On an equational property of modules

We consider a property of infinite systems of equations related to equational (or algebraic) compactness. For example, it can be shown that over any abelian group a finitely solvable system of k equations, where k is a cardinal of uncountable cofinality, always has a solvable subsystem consisting also of k equations. Some pathological (and some not so pathological) aspects of this notion when compared with equational compactness are presented. As an application, this property is used to provide a supply of ultrapowers that fail to be equationally compact.