



CENTRO DE
MATEMÁTICA
UNIVERSIDADE DO PORTO

Algebra, Combinatorics and Number Theory Seminar

Date. Monday, April 07, 2025 - 2.30pm ¹

Place. FC1 007 (and online)

Speaker. Yusuf Alagöz - Hatay Mustafa Kemal University, Turkey

Title. An alternative perspective on min-injectivity of modules

Abstract. Quasi-Frobenius rings were introduced by Nakayama in the study of representations of algebras. Afterwards, Quasi-Frobenius rings played a central role in ring theory, and numerous characterizations were given by various authors. In particular, Ikeda characterized these rings as two sided self-injective and two sided Artinian. Numerous investigations have been conducted to improve Ikeda's mentioned result by weakening either the Artinian condition, or the injectivity condition, or both, and this has led to the discovery of new concepts of rings and modules such as simple-injectivity and min-injectivity of rings and modules. Nicholson and Yousif approached the Ikeda's result with min-injective modules that are more general than injectivity. They show that a right Artinian two sided min-injective ring is quasi-Frobenius. This basic approach is concerned with when a min-injective ring become injective. Considering this point of view, in this talk, we aim to present some new results about the rings whose min-injective right modules are injective.

This is joint work with S. Benli-Göral, E. Büyükaşık, J.R. Garcia Rozas and L. Oyonarte.

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There will be a coffee break after the talk.

¹<https://fc-up-pt.zoom.us/j/85243807260>