

## HACETTEPE ÜNİVERSİTESİ MATEMATİK BÖLÜMÜ GENEL SEMİNERİ

## (HACETTEPE UNIVERSITY MATHEMATICS GENERAL SEMINAR)

Tarih (Date): 27.05.2015, Çarşamba (Wednesday)
Saat (Time): 15:30 – 16:20
Yer (Place): Yaşar ATAMAN Seminer Salonu
Konuşmacı (Speaker): Prof. Dr. Pedro A. Guil Asensio (Murcia University)
Başlık (Title): Automorphism-invariant Modules

Özet (Abstract) : A module M is called automorphism-invariant when it is invariant under any automorphism of its injective hull E. We will show that it is possible to characterize the structure of these modules by means of the additive unit structure of the endomorphism ring of E. Moreover, using this characterization, we will extend this notion to modules invariant under automorphisms of arbitrary covers and envelopes and obtain similar characterizations of them. In particular, we will apply our results to modules invariant under automorphisms of their pure-injective envelopes, cotorsion envelopes, projective covers and flat covers.