



ODTU-Bilkent Algebraic Geometry

Vector invariants of a permutation group over characteristic zero

By

Müfit Sezer
(Bilkent)

Abstract: We consider a finite permutation group acting naturally on a vector space V over a field k . A well known theorem of Göbel asserts that the corresponding ring of invariants $k[V]^G$ is generated by invariants of degree at most $\dim V$ choose 2. We point out that if the characteristic of k is zero then the top degree of the vector coinvariants $k[mV]^G$ is also bounded above by n choose 2 implying that Göbel's bound almost holds for vector invariants as well in characteristic zero.

This work is joint with F. Reimers.

Date: 18 November 2022, Friday

Time: 15:40 (GMT+3)

Place: Zoom

To request the event link, please send a message to sertoz@bilkent.edu.tr