ALGEBRA SEMINAR

On theoretical and computational aspects of trivial source characters

By

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Abstract: Let G be a finite group and let k be a large enough field of characteristic p dividing |G|. The trivial source kG-modules are precisely the indecomposable direct summands of the permutation kG-modules. It is possible to assign a well-defined ordinary character to each trivial source module.
This talk is concerned with two focal points: firstly, we present one possible computational approach to determine these characters explicitly in general using, for example, the open-source computer algebra system GAP. Secondly, for the case of block algebras whose defect groups are isomorphic to a Klein four-group, we determine the trivial source characters theoretically.
In the end, we apply these results to some examples.

Date: Wed, 9 April 2025
Time: 13:30
Place: Zoom
To request the event link, please send a message to d.yilmaz@bilkent.edu.tr