



# ALGEBRA SEMINAR

## Tuple regularity and $k$ -ultrahomogeneity for finite groups

By

**Sofia Brenner**  
(TU Darmstadt)

**Abstract:** Studying finite groups from a combinatorial perspective leads to a demand for combinatorial symmetry and regularity measures. In this context, we develop the concepts of  $k$ -ultrahomogeneity and  $k$ -tuple regularity for finite groups. They are inspired by analogous concepts in graph theory and form natural generalizations of previously known group-theoretic properties such as ultrahomogeneity and automorphism transitivity. In my talk, I will discuss both notions and present a classification result.

**Date:** Wednesday, March 27, 2024

**Time:** 13:30

**Place:** ZOOM

To request the event link, please send a message to [d.yilmaz@bilkent.edu.tr](mailto:d.yilmaz@bilkent.edu.tr)