ALGEBRA SEMINAR

Stable perfect isometries of blocks of finite groups

By

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Abstract: This is joint work with Robert Boltje. Let (K,O,F) be a p-modular system which is large enough for finite groups G and H. Let A be a p-block of the group algebra OG, and B be a p-block of the group algebra OH.
In 1990, Michel Broue' introduced the definition of a perfect isometry between the p-blocks A and B which is a generalized K-valued character leading to a special bijection between the sets of ordinary irreducible characters of A and B. In this talk, we introduce and investigate the notion of stable perfect isometries - a way to consider perfect isometries up to generalized projective characters of the corresponding p-blocks.
Our interest lies in understanding in which cases a stable perfect isometry can be lifted to a perfect isometry. We will answer this question for the p-block OP where P is an abelian p-group.

Date: May 11, 2022
Time: 19:00 (UTC+3)
Place: ZOOM. To request the event link, please send a message to barker@fen.bilkent.edu.tr