

On the Solvability of the Lie Algebra $\mathrm{HH}^1(B)$ for Blocks of Finite Groups

Wednesday, July 23, 2025 2:30 PM (30 minutes)

We give some criteria for the Lie algebra of first degree Hochschild cohomology of the twisted group algebra, i.e. $\mathrm{HH}^1(k_\alpha(P \rtimes E))$, to be solvable, where P is a finite abelian p -group, E is an abelian p' -subgroup of $\mathrm{Aut}(P)$ and $\alpha \in Z^2(E; k^\times)$ inflated to $P \rtimes E$ via the canonical surjection $P \rtimes E \rightarrow E$.

As a special case, this gives the criterion to the solvability of the Lie algebra $\mathrm{HH}^1(B)$ where B is a p -block of a finite group algebra with abelian defect P and inertial quotient E .

Motivation for Participation

Application for a talk

E-Mail

Special requests and comments

Academic Status

Financial Support

Institution (University)

Topic of your talk

Comments and Suggestions on the Community Agreement

Nationality

Country of Institution

Preferred Name

Gender

Preferred Pronouns

Presenter: WANG, Jay