

## ALGEBRA SEMINARS

## The p-solvable case of two conjectures on structures within the source algebra.

By

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<u>Abstract:</u>The source algebra of a block is an algebra equipped with an action of the defect group as automorphisms. Luis Puig, the predominant pioneer of the modern approach to p-local group representation theory, speculated that the source algebra of a block captures all the p-local invariants. Perhaps the p-local invariants should be, by definition, the invariants of the source algebra. Yet the source algebra remains enigmatic. The following work is joint with Matthew Gelvin.

Two conjectures on the structure of the source algebra were discussed by Gelvin in the Algebra Seminar last week. We shall review them in the more general context of almost-source algebras.

We shall outline a proof that, for any block of a p-solvable group, there exists an almost-source algebra for which the conjectures hold.

Date: February 18, 2019 <u>Time:</u> 10:40 – 11:50 <u>Place:</u> SA141 Mathematics Seminar Room

\* Tea and cookies will be served before the talk. All are most cordially invited.