THE FIELDS INSTITUTE
FOR RESEARCH IN MATHEMATICAL SCIENCES

ABSTRACTS 1.2

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Strongly simply connected coil algebras (25-30)

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Let k be an algebraically closed field and $A = kQ/I$, where kQ is the path algebra of a connected finite quiver Q with no oriented cycle, and I is an admissible ideal of kQ. Let A be a coil enlargement of a tame concealed algebra C. It is known that A has two full convex subcategories A^+ and A^- which are, respectively, the maximal branch extension and the maximal branch coextension of C inside A, and that A is tame if and only if A^+ and A^- are tame (in this case, A is called a coil algebra). In this talk, we prove that A is strongly simply connected if and only if A^+ and A^- are strongly simply connected. We also give several equivalent conditions to the fact that the coil algebra A is strongly simply connected.