THE FIELDS INSTITUTE

ABSTRACTS 1.2

FOR RESEARCH IN MATHEMATICAL SCIENCES

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Algebras whose fundamental group is free

This is joint work with Diane Castonguay.

We call an algebra A of the first kind if each indecomposable summand X of the radical of any indecomposable projective A-module is of the form $F_{\lambda}(Y)$, where F : B - - > A(X) is the universal covering of the convex closure of supp(X). For instance, every representation-finite algebra is of the first kind. A triangular algebra A of the first kind has a free fundamental group. If moreover A is schurian, then the universal Galois cover is separated. We give some applications.