

Connected gradings and fundamental group

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Our purpose is to provide explicit computations of the fundamental group of several algebras. With this intention in mind, given a k -algebra A , we consider the category of all connected gradings of A by a group G and we study the relation between gradings and Galois coverings.

This theoretical tool gives information about the fundamental group of A , which allows its computation using complete lists of gradings.

References

- [1] C. Cibils, M. J. Redondo, A. Solotar *Connected gradings and fundamental group*. arXiv:0906.3069v1 [math.RA]