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Modular G-graded algebras and G-algebras of endomorphisms

DANA DEBORA GLIŢIA

ABSTRACT.

We study Clifford Theory and field extensions for strongly group-graded algebras. In [Turull, A., *Clifford theory and endoisomorphisms*, J. Algebra **371** (2012), 510–520] and [Turull, A., *Endoisomorphisms yield mo-dule and character correspondences*, J. Algebra **394** (2013), 7–50] the author introduced the notion of *endoisomorphism* showing that there is a natural connection between it and Clifford Theory of finite group algebras. An endoisomorphism is an isomorphism between G-algebras of endomorphisms, where G is a finite group. We consider here endoisomorphisms between modules over strongly G-graded algebras. An endoisomorphism induces equivalences of categories with some good compatibility properties (see Theorem **??** and Theorem **??** below).

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BABEŞ-BOLYAI UNIVERSITY
FACULTY OF MATHEMATICS AND COMPUTER SCIENCES
KOGĂLNICEANU 1, 400084 CLUJ-NAPOCA, ROMANIA
E-mail address: dana.glitia@math.ubbcluj.ro

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