1007-16-227

Alex S Dugas* (asdugas@math.berkeley.edu), Department of Mathematics, Evans Hall, University of California, Berkeley, CA 94720, and Roberto Martinez Villa. A note on stable equivalences of Morita type. Preliminary report.

We study the problem of lifting a stable equivalence $\alpha : \underline{\text{mod}} \Lambda \to \underline{\text{mod}} \Gamma$ to an exact functor $F : \text{mod } \Lambda \to \text{mod } \Gamma$. If Λ and Γ are selfinjective algebras over a perfect field k, we show that such a lift of α exists if and only if α is of Morita type. This extends a result of Linckelmann's for symmetric algebras. We then go on to show that in this situation, it is possible to replace Λ by a Morita equivalent k-algebra Δ such that Γ is a subring of Δ and the induction and restriction functors induce inverse stable equivalences of Morita type. (Received February 22, 2005)