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TITLE: On Morita algebras and Auslander algebras

ABSTRACT: This is a report from joint work with Otto Kerner.

Algebras and modules in my talk are finite dimensional over a field. An algebra is called a *Morita algebra* if it is isomorphic to the endomorphism algebra of a generator over a selfinjective algebra. In 1958, K.Morita [M] gave a characterization for an algebra to be a Morita algebra, and recently, by Fang and Koenig ([FK1], [FK2], etc.), Morita algebras have been attracting attention from the study of dominant dimension.

In my talk I will consider the problem when the endomorphism algebra of a generator over an (not necessarily selfinjective) algebra is Morita and, as an application, consider relations between Morita algebras and Auslander algebras.

[FK1] M.Fang and S.Koenig, *Endomorphism algebras of generators over symmetric algebras*, J. Algebra 332 (2011)

[FK2] M.Fang and S.Koenig, *Gendo-symmetric algebras, canonical comultiplication, bar cocomplexes and dominant dimension*, to appear in Trans. Amer. Math. Soc.

[M] K.Morita, *Duality for modules and its applications to the theory of rings with minimum condition*, Sci. Rep. Tokyo Kyoiku Daigaku, Sec. A, 6 (1958)