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J. A. de la Peña and **B. Tomé*** (bta@hp.fciencias.unam.mx), Circuito Exterior, Ciudad Universitaria, 04510 México, D.F., Mexico. *Extension of an algebra by a representation-finite algebra and the extension form*. Preliminary report.

We consider a triangular matrix algebra of the form

$$A = \begin{pmatrix} B & {}_B M_R \\ 0 & R \end{pmatrix}$$

where B and R are triangular k -algebras and ${}_B M_R$ is a bimodule. We assume moreover that R is representation-finite and associate to A an integral quadratic form p_A called the extension form of A . We use the extension form to give criteria for the representation type of A . In particular, we show that when B is simply connected and M is indecomposable, A is representation-finite if and only if p_A is weakly positive. (Received February 21, 2005)