1084-16-139 **Louis H. Rowen*** (`rowen@math.biu.ac.il`), 52900 Ramat-Gan, Israel. *Representability of algebras finite over their centers.*

(Joint work with L. Small)

An algebra R (not necesssarily associative) over a central subring Z, is called **representable** if, for a suitable field K, R is embeddable as a C-subalgebra of a finite dimensional K-algebra W. R is **strongly representable** if W can be taken to be the localization $S^{-1}R$ for some multiplicative submonoid S of Z.

The motivation comes from the associative theory, in which case we could take $W = M_n(K)$ for suitable n.

Beidar [**?**] proved that any associative algebra finite (as a module) over a commutative Noetherian affine algebra over a field is representable, and his theorem turns out to be required for other important theorems in PI-theory. Anan'in proved more generally that every left Noetherian PI-algebra that is affine over a field is representable.

An algebra is called **weakly Noetherian** if it satisfies the ACC on ideals. We prove (with a straightforward argument):

Theorem A: If a weakly Noetherian algebra R is finite (as a module) over a central subalgebra Z which contains a field F_0, then R is a finite subdirect product of strongly representable algebras.

Theorem A fails when we weaken its hypotheses. Other related results are also presented. (Received August 29, 2012)